PUBLIC UTILITIES COMMISSION
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SAN FRANCISCO, CA 94102-3298

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Ratesetting

TO: PARTIES OF RECORD IN RULEMAKING 14-07-002:

Enclosed are the proposed decision of Administrative Law Judges' (ALJ) Jessica T. Hecht, Valerie U. Kao and Mary McKenzie previously designated as the principal hearing officers in this proceeding and the alternate proposed decision of Commissioner Guzman-Aceves. The proposed decision and the alternate decision will not appear on the Commission's agenda for at least 30 days after the date it is mailed.

Pub. Util. Code § 311(e) requires that the alternate item be accompanied by a digest that clearly explains the substantive revisions to the proposed decision. The digest of the alternate proposed decision is attached.

This matter was categorized as ratesetting and is subject to Pub. Util. Code § 1701.3(c). Upon the request of any Commissioner, a Ratesetting Deliberative Meeting (RDM) may be held. If that occurs, the Commission will prepare and publish an agenda for the RDM 10 days before hand. When an RDM is held, there is a related *ex parte* communications prohibition period. (See Rule 7(c)(4).)

When the Commission acts on these agenda items, it may adopt all or part of the decision as written, amend or modify them, or set them aside and prepare its own decision. Only when the Commission acts does the decision become binding on the parties.

Parties to the proceeding may file comments on the proposed decision and alternate proposed decision as provided in Pub. Util. Code §§ 311(d) and 311(e) and in Article 19 of the Commission's "Rules of Practice and Procedure," accessible on the Commission's website at http://www.cpuc.ca.gov. Pursuant to Rule 77.3 opening comments shall not exceed 15 pages.

Comments must be filed with the Commission's Docket Office. Comments should be served on parties to this proceeding in accordance with Rules 2.3 and 2.3.1. Electronic copies of comments should be sent to ALJs Hecht and Kao at jessica.hecht@cpuc.ca.gov and valerie.kao@cpuc.ca.gov, and to Commissioner Guzman Aceves's advisors David Gamson and Maria Sotero at david.gamson@cpuc.ca.gov and maria.sotero@cpuc.ca.gov. All parties must serve hard copies on the ALJ and the assigned Commissioner, and for that purpose I suggest hand delivery, overnight mail or other expeditious methods of service. The current service list for this proceeding is available on the Commission's web site, www.cpuc.ca.gov.

/s/ ANNE E. SIMON
Anne E. Simon
Acting Chief Administrative Law Judge

AES:ek4

Attachment

DIGEST OF DIFFERENCES BETWEEN ADMINISTRATIVE LAW JUDGES HECHT, KAO, AND MCKENZIE'S PROPOSED DECISION AND THE ALTERNATE PROPOSED DECISION OF COMMISSIONER MARTHA GUZMAN ACEVES

Pursuant to Public Utilities Code Section 311(e), this is the digest of the substantive differences between the proposed decision of Administrative Law Judges Hecht, Kao, and McKenzie (mailed on February 20, 2018) and the proposed alternate decision of Commissioner Martha Guzman Aceves (also mailed on February 20, 2018).

This alternate decision adopts three new programs to promote the installation of renewable generation among residential customers in disadvantaged communities (DACs), as directed by the California Legislature in Assembly Bill (AB) 327 (Perea), Stats. 2013, ch. 611. AB 327 directed the Commission to develop a standard contract or tariff applicable to customer-generators with renewable electrical generation, as a successor to then-existing Net Energy Metering tariffs, and, as a part of this mandate, required the Commission to develop specific alternatives designed to increase adoption of renewable generation in DACs.

Both the Proposed Decision and the Alternate adopt two new programs modeled after existing programs that have successfully increased access to renewable generation, here targeted specifically to assist DACs. Both the Proposed Decision and the Alternate adopt the Disadvantaged Communities – Single-family Solar Homes (DAC-SASH) program, modeled after the SASH Program, to provide assistance in the form of up-front financial incentives towards the installation of solar generating systems on the homes of low-income homeowners who are resident-owners of single-family homes in DACs. Both the Proposed Decision and the Alternate adopt the Disadvantaged Communities – Green Tariff (DAC-Green Tariff) program modeled after the Green Tariff portion of the Green Tariff/Shared Renewables Programs adopted in D.15-01-051.

The Alternate (but not the Proposed Decision) adopts a new Community Solar program which will allow primarily low-income customers in highly disadvantaged communities to benefit from the development of solar generation projects located in their own or nearby disadvantaged communities. The program is similar to the current VNEM programs but tailored to the most disadvantaged communities in PG&E, SCE and SDG&E's territories. The Community Solar program is targeted towards homeowners with unsuitable roofs and those who rent rather than own their homes. The Community Solar program provides these low-income customers opportunities to generate their own solar power.

A Community Solar project would likely be a solar array located on the rooftop of a building (or other feasible space on the property) owned by a residential, commercial, non-profit or governmental entity. A project may be owned by the owner of the building, or the owner can be the host for a project owned by a third-party; the third-party may consist of members of the community. The project would then sell an interest to community members, or community members would make a payment to the developer through a mutually agreeable arrangement. The project would interconnect to the utility. The utility would deliver the electricity, while customers would receive VNEM credits from, and pay the underlying rate to, the utility. The host would also receive VNEM credits.

Other elements of the program include:

- A project must be:
    - located in the territory of one of the three large electric IOUs, and
    - located either within the same disadvantaged community as the customers it serves or
    - within a top 25% CalEnviroScreen3.0-designated disadvantaged community located no more than 5 miles away from the disadvantaged community it serves
- All customers of a project must be in the same top 5% CalEnviroScreen 3.0-designated disadvantaged community in each IOU's territory or reside in the same San Joaquin Valley community identified in R.15-03-010.
- At least 50% of each Community Solar project's capacity must be allocated to low-income customers.
- No more than 25% of a project's capacity can be allocated to certain non-residential customers.
- The host can utilize no more than 50% of the project's capacity in most cases.
- Project size is limited to 30% of the total program capacity in that IOU's Community Solar program.
- Program size is limited to 18/18/5 MW for PG&E/SCE/SDG&E, respectively.
- CARE-eligible and FERA-eligible customers are exempt from the NEM Successor requirement that mandates customers be on TOU rates.
- Rules are set for allocation of a project's output and VNEM credits.
- Some consumer protection rules are imposed, with others to be developed in a different phase of this proceeding.
- Customers of CCAs and direct access customers may also participate.

PG&E, SCE and SDG&E are directed to file Advice Letters and tariffs to implement the Community Solar program.

Decision **PROPOSED DECISION OF ALJS HECHT, KAO AND MCKENZIE**
(Mailed 2/20/2018)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Develop a Successor to Existing Net Energy Metering Tariffs Pursuant to Public Utilities Code Section 2827.1, and to Address Other Issues Related to Net Energy Metering.	Rulemaking 14-07-002

DECISION ADOPTING ALTERNATIVES TO PROMOTE SOLAR DISTRIBUTED GENERATION IN DISADVANTAGED COMMUNITIES

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DECISION ADOPTING ALTERNATIVES TO PROMOTE SOLAR DISTRIBUTED GENERATION IN DISADVANTAGED COMMUNITIES

Summary

This decision adopts two new programs to promote the installation of renewable generation among residential customers in disadvantaged communities (DACs), as directed by the California Legislature in Assembly Bill (AB) 327 (Perea), Stats. 2013, ch. 611. AB 327 directed the Commission to develop a standard contract or tariff applicable to customer-generators with renewable electrical generation, as a successor to then-existing Net Energy Metering tariffs, and, as a part of this mandate, required the Commission to develop specific alternatives designed to increase adoption of renewable generation in DACs.[1] In Decision (D.) 17-12-022, the Commission adopted the Solar on Multifamily Affordable Housing (SOMAH) program, which provides one avenue for certain low-income customers to access clean solar electric generation, with a special provision to increase solar installation in DACs. Along with SOMAH, the two programs adopted in this decision represent additional tools to facilitate the installation of renewable generation to differently situated customers in DACs, and are intended to provide a comparable set of renewable programs to residential low-income customers that residential general market customers can afford or access.

Both new programs adopted in this decision are modeled after existing programs that have successfully increased access to renewable generation, but the versions adopted here are targeted specifically to assist DACs. The DACs –

[1] Pub. Util. Code § 2827.1(b)(1). All further references to sections are to the Public Utilities Code, unless otherwise specified.

Single-family Solar Homes (DAC-SASH) program, modeled after the Single-family Affordable Solar Homes (SASH) Program, will provide assistance in the form of up-front financial incentives towards the installation of solar generating systems on the homes of low-income homeowners, defined as those verified to meet the income thresholds of the California Alternate Rates for Energy or Family Electric Rate Assistance programs. The DAC-SASH program will be available to low-income customers who are resident-owners of single-family homes in DACs. Unlike traditional SASH, eligibility for DAC-SASH is not limited to designated affordable housing units, and so will be available to a broader group of homeowners than the current SASH program. The incentives provided through DAC-SASH will assist low-income customers in overcoming barriers to the installation of solar energy, such as a lack of up-front capital or credit needed to finance solar installation.

The DACs – Green Tariff (DAC-Green Tariff) program is modeled after the Green Tariff portion of the Green Tariff/Shared Renewables Programs adopted in D.15-01-051. The DAC-Green Tariff program, like DAC-SASH, will be available to customers who live in DACs and meet the income eligibility requirements for the California Alternate Rates for Energy and Family Electric Rate Assistance programs. The DAC-Green Tariff will provide a 20 percent rate discount compared to their otherwise applicable tariff. This will allow customers who are not in a position to take advantage of SOMAH or DAC-SASH to choose clean energy options without the need to own their home and without the cost of installing their own distributed renewable energy generation systems. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company will offer the DAC-Green Tariff to their customers consistent with this decision.

Under the framework created in this decision, the DAC-SASH program will be run by a single, statewide Program Administrator (PA) to be chosen by the Commission's Energy Division from entities responding to a Request for Proposal. Once a PA is selected, the PA will submit a Tier 3 Advice Letter containing specific proposals for implementing the policies adopted here, as further discussed below.

1. Background

1.1. Procedural Background

Assembly Bill (AB) 327 (Perea), Stats. 2013, ch. 611, directed the Commission to develop a standard contract or tariff applicable to customer-generators with renewable electrical generation, as a successor to then-existing Net Energy Metering (NEM) tariffs. As a part of this mandate, the Commission is required to develop "specific alternatives designed for growth [in adoption of renewable generation] among residential customers in disadvantaged communities."[2]

The Commission initially considered tariff options for disadvantaged communities (DACs) along with various alternatives for a NEM successor tariff for use by the other customer-generators during 2015. Specifically, Energy Division staff held a workshop on April 7, 2015, to discuss defining and developing such alternatives. Energy Division staff also prepared a staff paper dated June 3, 2015, entitled *Energy Division Staff Paper Presenting Proposals for Alternatives to the NEM Successor Tariff or Contract for Residential Customers in Disadvantaged Communities in Compliance with AB 327* (Staff Paper), which offered

[2] Public Utilities Code (Pub. Util. Code) § 2827.1(b)(1). All further references to sections are to the Public Utilities Code, unless otherwise specified.

two proposals for alternatives to any NEM successor tariff or contract, and modeled the elements that party proposals for alternatives for DACs should include.[3]

In response to the June Ruling, nine parties submitted proposals that addressed alternatives for DACs (2015 Proposals).[4] Comments on parties' proposals were filed on September 1, 2015; reply comments were filed on September 15, 2015.[5] In Decision (D.) 16-01-044, the Commission adopted a NEM successor tariff (often referred to as "NEM 2.0") for use by residential customer-generators. In that decision, the Commission deferred adoption of alternatives for DACs, along with the implementation of AB 693 (Eggman), Stats. 2015, ch. 582, creating a Multi-family Affordable Housing Solar Roofs Program, to a second phase of the proceeding to ensure full consideration of both issues.[6]

An Administrative Law Judge (ALJ) Ruling issued on March 14, 2017 (March 2017 Ruling), sought updated proposals and/or comments on

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[3] *See* June 4, 2015 Administrative Law Judge's (ALJ) Ruling: (1) Accepting into the Record Energy Division Staff Papers on the AB 327 Successor Tariff or Contract; (2) Seeking Party Proposals for the Successor Tariff or Contract; and (3) Setting a Partial Schedule for Further Activities in this Proceeding (June Ruling).

[4] California Environmental Justice Alliance (CEJA); GRID Alternatives; Interstate Renewable Energy Council (IREC); Office of Ratepayer Advocates (ORA); Pacific Gas and Electric Company (PG&E); Southern California Edison Company (SCE); San Diego Gas & Electric Company (SDG&E); Solar Energy Industries Association (SEIA) and Vote Solar (jointly); and The Utility Reform Network (TURN).

[5] The following parties filed comments and/or reply comments: Brightline Legal Defense Fund; CEJA; Center for Sustainable Energy; Everyday Energy; Greenlining Institute (Greenlining); GRID Alternatives; IREC; Local Government Sustainable Energy Coalition; MASH Coalition; Marin Clean Energy (MCE); NEM-PAC 2.0 (Inland Empire Utilities Agency, Padre Dam Municipal Water District, Rancho California Water District, Terra Verde Renewable Partners, Valley Center Municipal Water District, jointly); ORA; PG&E; SCE; SDG&E; Sierra Club; SEIA, California SEIA, The Alliance for Solar Choice (TASC) (jointly); TURN; Vote Solar.

[6] Implementation of AB 693 was addressed in D.17-12-022.

alternatives for DACs. That ruling stated that proposals and comments should assume that the Commission will count the program it adopts to implement AB 693 "toward the satisfaction of the commission's obligation to ensure . . . specific alternatives designed for growth among residential customers in disadvantaged communities. . ." (Section 2870(b)(1).), and sought proposals for alternatives for DACs that are distinct from any program implementing AB 693. In formulating these proposals, the ruling directed parties, for the purposes of DAC tariff options, to propose a DAC definition with reference to the most recent screening tool developed by the California Environmental Protection Agency (CalEPA), known as CalEnviroScreen 3.0. Parties filed proposals for DAC alternatives on April 24, 2017. Comments were filed on May 26, 2017 and Reply Comments were filed on June 16, 2017.[7]

On December 14, 2017, the Commission adopted the Solar on Multifamily Affordable Housing (SOMAH) program in D.17-12-022, pursuant to the direction of AB 693, and found that SOMAH installations should be counted towards the Commission's obligation to encourage installation of renewables in DACs. This decision adopts additional mechanisms for encouraging growth of renewable distributed generation in DACs.

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[7] Proposals/Responses to ALJ Ruling were filed by: CEJA/Sustainable Economies Law Center (SELC), GRID Alternatives, IREC, Joint Solar Parties (SEIA, CALSEIA, VoteSolar), MASH Coalition, ORA, PG&E, SCE, SDG&E, TURN.

Comments were filed by: CEJA, CSE, Greenlining, GRID Alternatives, IREC, Joint Solar Parties, Lancaster CCA, MASH Coalition, MCE, PG&E, ORA, SCE, TASC, TURN.

Reply Comments were filed by: CEJA, California Housing Partnership Coalition (CHPC), California Union Employees (CUE), IREC, Joint Solar Parties, MASH Coalition, ORA, Peninsula Clean Energy (PCE), PG&E, SCE, SDG&E.

1.2. Previous Programs to Promote Solar Development in Low-income Communities

California has a long history of supporting the adoption of solar generation in low-income and DACs. Specifically, the Multifamily Affordable Solar Housing (MASH) and Single-family Affordable Solar Homes (SASH) programs originated under the California Solar Initiative (CSI) more than a decade ago. These programs were created in compliance with the direction in AB 2723 (Pavley) Stats. 2006, ch. 864, which required the Commission to ensure that not less than 10 percent of overall CSI funds be used for installation of solar energy systems on "low-income residential housing," as defined in the bill. In 2007 and 2008, the Commission adopted programs implementing this requirement. Specifically, in D.07-11-045, the Commission adopted the SASH program for qualifying low-income single-family homeowners, and in D.08-10-036, the Commission adopted the MASH program to provide incentives for solar installations on multifamily affordable housing.

In 2013, the Legislature passed AB 217 (Bradford), Stats. 2013, ch. 609, which authorized $108 million in new funding for MASH and SASH; set a goal of 50 megawatts (MW) of installed capacity across both programs; and extended both programs until 2021, or the exhaustion of the new funding, whichever occurs first. Pursuant to this legislation, the Commission reauthorized both programs in D.15-01-027, which also made changes to program administration and eligibility requirements. Both programs have been evaluated by Navigant Consulting, most recently in a Market and Program Administrator Assessment of the 2011-2013 program years, completed in early 2016.

The MASH program is essentially closed to new applications at this time because all funds allocated to that program have been reserved for projects, with

additional unfunded projects remaining on the program's waitlists in each utility territory. In D.17-12-022, the Commission adopted a new program, SOMAH, which serves a similar market segment to MASH, with a focus on multi-family affordable housing. The Commission developed SOMAH in part to satisfy the AB 327 requirements to promote development of on-site renewable generation in DACs, as multifamily affordable housing properties in DACs may qualify for SOMAH even if properties do not meet all tenant income requirements for eligibility.

The SASH program serves single-family units inhabited by low-income residents of PG&E, SDG&E, and SCE, and is run by a single state-wide administrator, the non-profit GRID Alternatives. Unlike MASH, SASH has funding remaining, and is expected to continue operating through the program's statutory sunset date of 2021.

2. Goals for Programs Benefitting DACs

In this decision, we consider the creation or augmentation of several programs intended to benefit customers in DACs, with a particular focus on low-income residential customers within those communities. As noted above, we are guided by Pub. Util. Code § 2827.1(b)(1), which requires the Commission to:

> Ensure that the standard contract or tariff made available to eligible customer-generators ensures that customer-sited renewable distributed generation continues to grow sustainably and include specific alternatives designed for growth among residential customers in disadvantaged communities.

Our intent in adopting the programs set forth in this decision is to ensure that low-income households in DACs have similar opportunities as other households to access clean and innovative energy offerings.

In parties' initial comments and proposals on options for promoting use of solar generation in DACs, parties agreed that the plan for alternatives for growth in DACs should not be embodied in the NEM successor tariff itself. In AB 327, the Legislature determined that there is a need for additional attention to alternatives for expanding accessibility of solar generation in DACs that was not served through the original NEM tariff itself. It is reasonable to conclude that the incentives provided by the original NEM tariffs, including compensation at the full retail rate for exported energy and exemption from all charges imposed on other residential customers, were not sufficient. The successor to the original NEM tariff adopted in D.16-01-044 shares many features with the original NEM tariff, and similarly was not designed to address the specific barriers to adoption experienced in DACs. For this reason, the alternatives for growth must be found outside the successor tariff itself. As noted in D.16-01-044,[8] parties argue, and we find, that the statutory criteria for the successor tariff, such as the requirement to ensure that the total costs are approximately equivalent to total benefits,[9] should not be applied in the development of alternatives for DACs.[10] Because this program serves multiple state policy goals, and is intended as an equity program to allow low-income customers and those in DACs to access solar distributed

[8] D.16-01-044, Footnote 62, at 50-51. Most parties reiterate their support of this conclusion in comments filed in response to the March 2017 Ruling.

[9] D.16-01-044. Footnote 62, at 50-51.

[10] Considering how to ensure continuing growth, the fundamental task of the successor tariff and the alternatives, should be addressed as discussed in Section 2.17.3.

generation and clean energy on the same basis as other residential customers, we find that it is appropriate not to apply this constraint to DAC programs.[11] Instead, the options adopted here should directly address the specific barriers to solar adoption experienced in DACs.

To develop programs responsive to this guidance, we must ensure that the programs address the specific obstacles to the development of renewable generation in DACs. Several of these obstacles are identified in the staff paper attached to the Administrative Law Judge's June 24, 2015 ruling requesting comments on alternatives for DACs,[12] and in the California Energy Commission's *Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities* (Barriers Report).[13] The Barriers Report outlines an array of distinct challenges facing customers within low-income areas and DACs to accessing solar photovoltaic energy generation as well as other renewable energy, including low home ownership rates, insufficient access to capital, building age, and remote or underserved communities. The program options identified in this decision are intended to address many of these barriers.

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[11] *See*, for example, MASH Coalition Comments filed April 24, 2017 at 7-8, GRID Alternatives Comments filed April 24, 2017, at 38-39.

[12] *Energy Division Staff Paper Presenting Proposals for Alternatives to the NEM Successor Tariff or Contract for Residential Customers in Disadvantaged Communities in Compliance with AB 327 (Staff Paper),* Attached to ALJ Ruling dated June 4, 2015.

[13] *Low-Income Barriers Study, Part A: Overcoming Barriers to Energy Efficiency and Renewables for Low-Income Customers and Small Business Contracting Opportunities in Disadvantaged Communities,* California Energy Commission, December 2016.

2.1. Adoption of Multiple Program and Tariff Options

Some parties favor the creation or augmentation of one program or another to the exclusion of others. For example, SCE believes a discounted GTSR program is a more cost-effective solution than SASH augmentation for immediately addressing barriers to access to clean energy sources by customers in DACs. Similarly, TURN contends that its proposed Renewable Energy for All program is a more targeted and better way than VNM to achieve the mandate of § 2827.1(b)(1) and increase access for those who have traditionally faced barriers to renewable distributed generation adoption. The MASH Coalition favors Community Solar or SASH proposals because it asserts that GTSR programs are not community-based.

By contrast, other parties such as Greenlining urge the Commission to adopt multiple programs to address the diverse barriers to solar adoption by customers in low-income areas and DACs. We find that it is appropriate to adopt multiple program options for the households we target here in order to ensure that low-income households in DACs have similar opportunities as other households to access clean and innovative energy offerings. In addition, multiple programs will address the variety of barriers facing low-income residents in DACs. Different groups have different needs and may find different options to be appealing; in addition, different types of customers may have different barriers to their use of renewable energy. There is significant variation in housing types for low-income households; some live in multi-family housing, some own their homes, some are renters in single-family homes. Households also face different financial situations, have different expected lengths of residence in their homes, and have different priorities (*e.g.*, some may care more

about local siting and ownership of green resources than others). Today's decision is intended to reach out to different communities in more ways than previous decisions related to solar and distributed generation options.

At the same time, we will not adopt all of the proposals presented by parties. As discussed herein, there are competing proposals to accomplish the same goals, and some proposals raise legal and technical issues that we are not yet in a position to fully address. As a result, we approve programs that meet the Commission's objectives efficiently and can be implemented effectively.

3. Definition of Disadvantaged Communities

Section 2827.1 does not provide a definition of "disadvantaged communities." The Commission does not, however, need to create a definition from scratch. In Health and Safety (H&S) Code Section 39711, the Legislature created a process for identifying DACs for purposes of investment of funds from the Greenhouse Gas (GHG) Reduction Fund.

The California Environmental Protection Agency (CalEPA) has implemented the legislative instruction by using a screening tool created in partnership with the Office of Environmental Health Hazard Assessment (OEHHA), called CalEnviroScreen; the current version of CalEnviroScreen is CalEnviroScreen 3.0.[14] CalEPA and the California Air Resources Board (CARB) have used CalEnviroScreen to fulfill the legislative requirement of identifying DACs for purposes of distribution of certain funds from the Greenhouse Gas Reduction Fund. The agencies concluded that a "disadvantaged community" is

[14] The tool may be found at: https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30.

a community that appears among the top 25 percent of census tracts identified by CalEnviroScreen 3.0 statewide.[15]

The *Staff Disadvantaged Communities Paper* recommended the use of the predecessor tool, CalEnviroScreen 2.0, and the CalEPA/CARB result for characterizing DACs for purposes of the programs related to the NEM successor tariff. Specifically, staff recommended using the "top 25 percent of communities statewide identified by CalEnviroScreen 2.0" metric used by CalEPA and CARB. In the March 2017 Ruling requesting updated proposals, parties were asked to use the results of the current tool, CalEnviroScreen 3.0, in their analysis. CalEPA has stated its commitment to regularly revising the CalEnviroScreen tool with updated information and data.[16] We find that in the event the CalEnviroScreen methodology is updated again in the future, the revised version of CalEnviroScreen should be used for the purposes of ongoing identification of DACs.[17]

Parties proposed several different ways in which the CalEnviroScreen tool can be used to identify DACs. The two most common eligibility

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[15] *See* https://oehha.ca.gov/calenviroscreen/sb535

[16] California Communities Environmental Health Screening Tool, Version 2.0 Report, October 2014, at i: http://oehha.ca.gov/ej/pdf/CES20FinalReportUpdateOct2014.pdf.

[17] In its "Designation of Disadvantaged Communities Pursuant to Senate Bill 535 (De León)," CalEPA states that it "will work with local and regional jurisdictions to review our data and verify results. If recalculation of a community's CalEnviroScreen2.0 score shows that it should have been identified as a disadvantaged community, we will add that community to the list for this designation. And we will not remove a community from the list for the current designation if recalculation of their CalEnviroScreen 2.0 score shows that they were incorrectly identified as a disadvantaged community. Accordingly, any changes to the current version of CalEnviroScreen 2.0 will have no bearing on funding decisions already in process." California Environmental Protection Agency, "Designation of Disadvantaged Communities Pursuant to Senate Bill 535 (De León), October 2014 at 15: http://www.calepa.ca.gov/EnvJustice/GHGInvest/Documents/SB535DesCom.pdf.

recommendations are to use the top 25 percent of DACs statewide as identified in the current CalEnviroScreen tool, or to define eligible communities as the top 25 percent of DACs within each participating utility's territory. In the March 14, 2017 ALJ Ruling, parties were asked:

> How should a disadvantaged community be defined for purposes of implementing the mandate of alternatives for growth among residential customers in disadvantaged communities set out in Section 2827.1(b)(1)?
> and:
>
> How should this definition be implemented by the Commission in designing alternatives for DACs?

PG&E and SDG&E recommend use of the top 25 percent of the most disadvantaged census tracts in their territory per the CalEnviro Screen 3.0 tool for this proceeding, while SCE would target the top 5 percent.

CEJA recommends, in agreement with the Joint Solar Parties, that the Commission apply the same methodology that it applied in its Electric Vehicle pilot decisions; that is, communities in the CalEnviroScreen top 25 percent of census tracts on either a state-wide or a utility-wide basis – whichever is broader. CEJA also recommends including program eligibility for low-income households in a half-mile radius around all qualifying census tracts.

TURN recommends that the Commission identify DACs as the top 20 percent of impacted census tracts on a service territory-specific basis. This definition accounts for the complications of identifying communities on a statewide basis, while also seeking to limit eligibility to the most DACs so the programs are sustainable. TURN notes that this is the same definition used for the existing GTSR program's Environmental Justice component.

ORA recommends the Commission maintain consistency across different proceedings and programs by using the CalEPA's CalEnviroScreen tool to define

DACs while supplementing eligibility criteria to include low-income individuals or buildings regardless of their location.

GRID Alternatives proposes that a DAC be defined as one of the following (a household would qualify if it is located in *either* 1 or 2):

> 1. A Health and Safety Code Section 39711-compliant community as identified by the CalEnviroScreen, using the framework established in the Electric Vehicle proceedings of top 25 percent of census tracts in each IOU or statewide, whichever is broader.
>
> 2. Pub. Util. Code §2852(3)(A)(i)(ii)(B)(i)(ii)(C)-compliant affordable housing (P.U. Code §2852-compliant).

Several parties express concern that relying on CalEnviroScreen alone to define DACs would exclude some rural communities with high poverty and pollution.[18] GRID Alternatives specifically notes that "many rural communities and all tribal reservations north of San Francisco and rural, coastal communities from Monterey to Los Angeles" are not included in the top 25 percent of communities identified by CalEnviroScreen 2.0 statewide.[19]

Although many of the parties' suggestions have some merit, the best choice here is the simplest, which is the definition included in AB 693 and already adopted for SOMAH. We define a "disadvantaged community" for the purpose of the options adopted in this decision as a community that is identified, by using CalEnviroScreen 3.0, as among the top 25 percent of communities statewide. In addition, 22 census tracts in the highest 5 percent of CalEnviroScreen's Pollution Burden, but that do not have an overall

[18] Brightline/SALEF, GRID Alternatives, Greenlining, IREC, and SEIA/Vote Solar, are in this group.

[19] GRID Alternatives Proposal at 10.

CalEnviroScreen score because of unreliable socioeconomic or health data, are also designated as DACs. This is the method developed and used by CalEPA and CARB, the agencies with expertise in this area, and it is reasonable for the Commission to use this definition to identify DACs to be served with the programs developed pursuant to Section 2827.1(b)(1).

Although the Legislature did not specifically cite to H&S Code § 39711 in AB 327, as it did in AB 693, it is clear that the concept of "disadvantaged communities" as articulated in H&S Code § 39711 and implemented by CalEPA has become the standard for use by state agencies.[20] In this context, SDG&E's suggestion to use the top 20 percent of communities in each IOU service territory identified by CalEnviroScreen is not appropriate, despite its origin in the Commission's decision in D.15-01-051. That decision set the framework for the green tariff/shared renewables (GTSR) program mandated by Sections 2831-2834. In D.15-01-051, the Commission was implementing a statutory directive to, among other things, reserve 100 MW of the mandated generating facilities for "the most impacted 20 percent" of communities. The Commission, for the sake of consistency among the various elements of the GTSR program, adopted the metric of "top 20 percent in each IOU service territory" to identify the relevant communities. This statute-specific metric should not be used in place of the more general, and more widely used, "top 25 percent under CalEnviroScreen" identification the Commission adopts for purposes of

[20] *See*, for a recent example, new Section 454.52(a)(1)(H), added by SB 350, directing the development of integrated resource plans that, among other things:

> Minimize localized air pollutants and other greenhouse gas emissions, with early priority on disadvantaged communities identified pursuant to Section 39711 of the Health and Safety Code.

compliance with Section 2827.1(b)(1). In addition, as for the SOMAH Program, it is appropriate to include 22 census tracts in the highest 5 percent of CalEnviroScreen's Pollution Burden, but that do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data, as DACs for the purposes of this decision.[21]

4. Targeted Customer Groups

ORA and TURN advocate that the Commission ensure that the disadvantaged community proposals be directed to provide benefits only to low-income customers. Both note that PG&E provided data that demonstrated that non-low income customers in its service territory adopted solar at similar rates, whether they were located within DACs (7.4 percent) or outside of DACs (7.3 percent), whereas low income customers lagged behind in adopting solar, both within DACs (2.4 percent) and outside of DACs (2.0 percent).[22] In PG&E's service territory, low-income customers located both within and outside of DACs have low adoption rates for solar. Also, low-income customers accounted for almost half of the customers in DACs and 18 percent of customers in non-DACs. Based on this, it appears that there is a high concentration of low-income customers within DACs with low rates of adoption of renewable distributed generation.[23]

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[21] EPS report: Designation Of Disadvantaged Communities Pursuant To Senate Bill 535 (De León), April 2017 at 2. *See* https://calepa.ca.gov/wp-content/uploads/sites/34/2017/04/SB-535-Designation-Final.pdf.

[22] ORA Reply Comments on DAC Proposals, June 24, 2017 at 2.

[23] TURN comments on DAC Proposals, May 26, 2017 at 12-13.

Our purpose in this decision is to implement statutory direction to provide enhanced clean energy options in DACs. While AB 327 does not give specific direction regarding whether or not only low-income households in DACs should be the target of these programs, we find that low-income customers, specifically those eligible for the California Alternate Rates for Energy (CARE) and Family Electric Rate Assistance (FERA) programs, currently experience the most barriers to solar adoption, and it is reasonable to target our efforts at this demographic group.

However, in making this choice, it is important to note that the Legislature used the term "disadvantaged communities," not "low-income individuals." CEJA points out that AB 327 uses both "disadvantaged communities" and "low-income" to refer to particular groups of customers and argues that the Legislature clearly intended to distinguish between the terms. Those proposals that seek to refocus on low-income individuals, or add criteria in order to allow low-income individuals not living in DACs to participate, miss the mark. While there may be value in other contexts to the definitional suggestions made by some parties, this legislation is about "residential customers in disadvantaged communities."

ORA also recommends that the Commission should expand eligibility for the alternative programs or tariffs in this decision to low-income customers who are located outside the DAC census tracts identified by the CalEnviroScreen tool. AB 327 is specific in directing us to develop programs for DACs. Therefore we limit the applicability of the programs adopted in this decision to such areas.

As noted in the descriptions of our policies below, we wish to target different populations, which may have different barriers to use of clean energy, with different programs. Therefore, we adopt here options that provide the

benefits of renewable distributed generation to a variety of customers residing in DACs. One program adopted here and described in Section 5.4, below, specifically focuses on low-income households living in owner-occupied, single-family homes. We believe that this, along with the SOMAH program adopted in D.17-12-022, which is focused on multifamily affordable housing and offers a DAC eligibility option, will address some of the barriers specific to low-income customers. Those include economic barriers such as insufficient access to capital and credit as well as marketing, outreach and linguistic barriers. The other option adopted here, an expanded GTSR tariff, will be more broadly available to residential customers in DACs, and will focus more on increasing the general availability of solar generation in these communities. This program will address property structure and property ownership barriers. In the discussion of specific programs in this decision we provide additional direction for participation in each particular program.

5. Proposals based on the Single-family Affordable Solar Homes (SASH)

Several parties recommended that the Commission adopt a variation or extension of the California Solar Initiative's (CSI) SASH Program. The goals of the SASH program[24] are to:

- Decrease electricity usage by solar installation and reduce energy bills without increasing monthly expenses;
- Provide full and partial incentives for solar systems for low-income participants;

[24] *See* CPUC Website page titled "CSI SASH Program" at http://www.cpuc.ca.gov/general.aspx?id=3043.

- Offer the power of solar and energy efficiency to homeowners;
- Decrease the expense of solar ownership with a higher incentive than the General CSI Program;
- Develop energy solutions that are environmentally and economically sustainable; and
- Provide job training and employment opportunities in the solar energy and energy efficiency sectors of the economy.

The SASH program, implemented in 2008, provides qualified low-income homeowners fixed, up front, capacity-based incentives to help offset the upfront cost of a solar electric system. Participation in the SASH program is currently available to PG&E, SCE and SDG&E customers with a household income that is 80 percent or below the area median income (AMI) and who own and live in a single family home defined as "affordable housing" under Section 2852. In D.07-11-045, the Commission determined that a single statewide Program Administrator should manage the SASH program across the three utility service territories and that a competitive solicitation should be conducted to fill this role.

AB 217 augmented the original funding and extended the program through 2021. In addition, this legislation adopted additional program requirements for both MASH and SASH. Specifically, the legislation directed that the Commission must ensure that the SASH program does the following:

1. Maximizes the overall benefit to ratepayers from the programs;
2. Requires participants who receive incentives to enroll in the Energy Savings Assistance Program if eligible; and

3. Provides job training and employment opportunities in the solar energy and energy efficiency sectors of the economy.[25]

D.15-01-027 updated MASH and SASH program requirements consistent with AB 217. This decision added $54 million to the SASH budget, and reduced incentive levels under the SASH program by half, from $6.00/watt to $3.00/watt. The current SASH program couples the program's incentive dollars ($7 million to $9 million each year) with GRID Alternatives' contributions (~$4M-$5M/year) from philanthropic fundraising, proceeds from the third-party ownership (TPO) model, equipment donations, and other resources to result in roughly 1,000 annual projects without relying on a financial contribution or ongoing financial obligation from the participating households. Based on a consensus of the parties reflected in the record of the rulemaking, D.15-01-027 directed SCE to renew its contract with GRID Alternatives for continued administration of the SASH program through 2021, the end of the AB 217 program extension. The SASH program is currently funded through 2021, or until funding is exhausted. In addition, D.15-01-027 requires SASH and MASH installers to provide job training and employment opportunities.

5.1. TURN SASH Proposal

TURN proposes to allocate an additional $10 million per year to the SASH program for units located in DACs through 2021 (the current sunset date for SASH funding), and to expand the SASH program eligibility to include owner occupied single-family housing units in DACs whose residents meet the income eligibility criteria used for CARE and FERA programs.

[25] Section 2852(d).

Citing the California Distributed Generation Statistics[26] for 2016, TURN suggests that the cost for a system sized under 10 kilowatts (KW) was $4.83 per watt. With this in mind, TURN contends the current SASH incentive level of $3 per watt is sufficient to motivate participation by covering the majority of system costs and ensuring that participants will receive bill savings from the installation of a renewable distributed generation system. As a result, TURN suggests that the existing $3.00 per watt incentive should be applied to the expanded version of SASH within DACs.

In addition, TURN describes the current SASH program's TPO option, which increases access to participation by low-income individuals. TURN proposes that the SASH TPO option should be available to DAC participants because access to capital for the upfront costs of owning or leasing a system is one of the key barriers to adoption of NEM in DACs. TURN notes that, according to the January 2017 edition of the SASH Semi-Annual Progress Report, a majority of the SASH projects installed in 2015 and 2016 are third-party owned and "it is expected that the TPO model will continue to be a significant contributor to financing SASH projects." Under the SASH third party ownership model, GRID Alternatives partners with Spruce Finance or Sunrun (the "TPO Partner"), which then acts as the underwriting agent for each project.

Resolution E-4829 explains how the TPO model works:

> The SASH host customer and the TPO Partner execute a 20-year PPA [power purchase agreement] and GRID [Alternatives] pays the system owner all PPA costs upfront on the SASH host customer's behalf (Prepaid PPA). Once the SASH host customer begins realizing bill savings, that

[26] https://www.californiadgstats.ca.gov.

> customer is asked to make a voluntary, quarterly financial contribution to GRID for the 20-year term of the PPA that cannot exceed more than 50 percent of the customer's bill savings (Client Contribution). GRID treats the Client Contribution as voluntary and there is no penalty for non-payment.

To fund its proposed SASH expansion, TURN recommends the additional funds proposed for the SASH program be treated as CARE program expenses and funded through the Public Purpose Program charge. TURN suggests that, because the NEM DAC alternative is a public purpose program and will primarily benefit low-income ratepayers, it is appropriate to treat funding associated with this program as a CARE expense.

5.2. GRID Alternatives SASH Proposal

GRID Alternatives is a non-profit, direct service organization that works with low-income families and affordable housing owners to provide access to solar distributed energy generation. In California, GRID Alternatives serves as the statewide program administrator for the state's two dedicated low-income solar programs for single-family households: SASH and the Low-Income Weatherization Program. GRID Alternatives was awarded the contract to administer SASH through a competitive bidding process at the time of the program's implementation.

GRID Alternatives argues that funding augmentation is needed now exclusively on the single-family SASH program side, rather than on both the multi-family MASH program side and the SASH program side, because AB 693 identified a funding source for up-front rebates for solar projects benefitting tenants in dedicated affordable multi-family housing, and set a long-term time horizon until 2030 for these investments. GRID Alternatives recommends extending the SASH program to 2030 from its current statutory end date in 2021,

and augmenting the SASH budget to increase penetration levels beyond the current implementation plan's strategy of approximately three MW per year.

GRID Alternatives recommends retaining the current SASH eligibility criteria, which would result in additional incentives becoming available to households with incomes at or below 80 percent of area median income living in owner-occupied homes that meet the definition of affordable housing codified in Section 2852(3)(C) within the territories of PG&E, SCE, and SDG&E.

5.3. Intervenor Comments on SASH Proposals

In comments filed on parties' 2017 proposals, GRID Alternatives expresses support for TURN's SASH proposal with some revisions. GRID Alternatives notes that $10 million per year increase in the SASH budget would essentially double the current annual funding allocation for SASH, potentially doubling the capacity installed through the program, as well as job training workdays created and other positive effects of the program. In addition, based on its experience working with low-income families and observing the persistent issues with creditworthiness, access to credit and capital, and structural barriers, GRID Alternatives suggests that low-income households will continue to require a financial incentive to access rooftop solar after the current program sunset in 2021. For administrative reasons including efficiency and standardization, GRID Alternatives recommends maintaining all existing eligibility and qualifying requirements of the program in this recommended extension through 2030. GRID Alternatives also notes that current SASH eligibility requirements are statutory requirements set by the Legislature when it adopted Section 2852 in 2007, and they were maintained when the program was extended by statue in 2013.

MASH Coalition agrees with TURN and GRID Alternatives that the expansion of SASH is an appropriate mechanism to promote the use of customer-sited solar generation for DACs. CSE, IREC, and TASC similarly support proposals to extend the SASH program to reach low-income single-family homes in DACs.

CEJA/SELC note that the SASH program as it currently exists would not result in significant growth in DACs because it is limited to deed-restricted single-family housing. CEJA/SELC support TURN's extension proposal, with minor modifications, because it is feasible without legislative action, broader than the existing SASH program, and therefore more likely to result in growth in DACs in single-family homes that are suitable for rooftop solar. CEJA/SELC advocate that the definition of DACs for the purposes of a SASH extension include low-income households within a half mile radius of CalEnviroScreen3.0 top 25 percent census tracts. TASC also agree with TURN that the SASH program should be expanded to CARE customers in DACs.

In comments on the DAC proposals, Greenlining supports including SASH as part of a suite of options for DACs. Greenlining finds the eligibility criteria of low-income owner-occupied compliant affordable single-family homes for expanded SASH consistent with the purpose of this program. Greenlining recognizes these criteria limit the number of residents in DACs eligible to participate. However, Greenlining asserts that a SASH expansion could be one in a set of alternatives that together serve a broader set of subpopulations.

In contrast to the non-profit and consumer representative parties described above, SCE believes SASH may not be the most effective way to address the immediate needs of DACs. Because SASH provides upfront incentives to customers who purchase solar distributed generation systems for their own

homes, a SASH expansion would only benefit a limited set of customers in DACs. SCE contends that SASH inherently excludes many low-income households that the statutory mandate for DAC alternatives to the NEM tariff are designed to reach, and that other proposals could reach, such as renters in multi-unit dwellings. SCE asserts that SASH is relatively higher in cost, as compared to proposals that leverage the Green Tariff/Shared Renewables Program. As a result, SCE believes a discounted GTSR program is a more cost-effective solution for immediately addressing DAC barriers.

Joint Solar Parties support a SASH expansion as one among a set of alternatives that may be approved in this proceeding. At the same time, the Joint Solar Parties suggest that there may be concerns about allowing SASH-funded solar arrays to be installed on homes that are not deed-restricted affordable housing. Specifically, the Joint Solar Parties note that if the original CARE or FERA-eligible customer moved out of the home, someone who does not qualify as low-income could move in and benefit from the majority of the bill savings flowing from that solar array. To address this issue, the Joint Solar Parties suggest that TURN's proposal could be modified to fund solely installations for CARE or FERA-eligible customers who live in deed-restricted affordable housing in the participating companies' territories.

5.4. Adoption of a DAC Single-family Solar Homes Program

Financial barriers, including the lack of capital for an initial down-payment or lack of access to credit pose a significant barrier to solar adoption for low-income households in DACs. The *Staff Paper* and California Energy Commission *Low-Income Barriers Report* detail these financial barriers to

solar adoption by low-income households, such as lack of access to capital or credit, or the inability to assume more debt.[27]

Low-income customers, whether or not they are located in DACs, often lack the upfront capital to purchase a customer-sited solar system outright. Even if a low-income family has capital available, adopting solar may be challenging if there are additional costs that cannot be financed, such as required roof repair or replacement or an electrical service upgrade. Low-income families and residents of DACs may be likely to experience these problems if they own an older home or lack the resources maintain or repair their homes. Low-income customers may have low to no tax liability, further impeding their ability to access Federal tax benefits. Loans, solar power purchase agreements, or solar leases are offered to general market customers as a standard option, along with purchasing a system outright. However, low-income customers in DACs are unlikely to have access to the credit needed to qualify for these options. Moreover, even if low-income customers qualify for a credit-based product, it can be unclear whether the family would receive long-term benefits. The SASH program is structured to overcome financial barriers for this customer segment, and allow for low-income households to participate and receive significant economic benefits.

Most parties agree that a SASH-like program would be a useful tool for overcoming barriers to renewable distributed generation among a certain set of residents (low-income resident owners of single-family homes) in DACs. While there is merit to SCE's point that there may be a more

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[27] "*SB 350 Low-Income Barriers Study, Part A - Commission Final Report*", December 5, 2016 at 35-37.

cost-effective solution for immediately addressing DAC barriers, we find that it is reasonable to provide a variety of options for low-income households, similar to the set of options already available to other customers. SASH provides a proven and successful model for expanding access to solar among low-income customers and for providing additional, non-energy benefits, such as job training. As TURN points out, the significant upfront incentives provided by the SASH expansion may be expected to effectively encourage growth in the adoption of renewable distributed generation in DACs by addressing the upfront costs of purchasing and installing a renewable distributed generation system.

TURN suggests that a budget increase of $10 million per year in funding for SASH would make a meaningful contribution in promoting installation of solar distributed generation. GRID Alternatives states that the current $7 million to $9 million annual SASH program budget, augmented by GRID Alternatives' own fundraising efforts of approximately $4 million per year, results in about 1,000 annual projects without a financial obligation from the participating households. GRID Alternatives contends that these levels could easily be tripled with proportional funding increases.

We agree that it is reasonable to adopt a variation of TURN's SASH augmentation proposal, with several modifications discussed here. Because the SASH budget and eligibility requirements are established in state statute, however, it would not be appropriate to merely extend the SASH program by augmenting its budget or broadening its eligibility requirements. Instead, we adopt a new program that is similar in structure to SASH, but is better targeted to residents of DACs, and is not limited by the SASH statutory eligibility limits. In addition, TURN's proposal does not fully address the statutory sunset of SASH in 2021. By creating a separate but similarly structured program, we are

able to continue a SASH-like program targeted to DACs through 2030, comparable to the recently-adopted SOMAH program, which serves low-income multifamily affordable housing statewide and has special eligibility criteria for DACs.

Given the direction in Section § 2827.1(b)(1) to expand growth of solar distributed generation in DACs, and the fact that many affordable housing units in DACs are already eligible for the SASH program, we see no clear rationale for limiting eligibility to affordable housing units. Our objective is to expand clean energy options for low-income households in DACs, and applying the affordable housing limitation to this new program would not increase the number of homes eligible for assistance, even if TURN's recommended budget augmentation would increase the number of homes that could be served in a given year. For these reasons, we adopt a new Single-family Solar Homes program for DACs, to be called the Disadvantaged Communities – Single-family Solar Homes program (DAC-SASH). The structure and administration of this program, along with the program incentive levels and authorization for the use of third-party ownership projects when they are determined to be cost effective, will be modeled after the existing SASH program. A summary of the DAC-SASH program elements is set forth in Appendix A. All SASH program rules not specifically changed in this decision or Appendix A shall apply to the DAC-SASH program.

Low-income customers of PG&E, SCE, and SDG&E are eligible for DAC-SASH if they own and occupy single-family homes in DACs as defined in this decision and meet the eligibility requirements of CARE or FERA. Because DAC-SASH provides a long-lasting capital improvement to properties, households must undergo an income verification process in order to qualify for DAC-SASH. As a result, enrollment in CARE or FERA, which do not require an

income verification process, is not on its own sufficient to qualify a household to participate in DAC-SASH; participants in those programs will need to go through an income verification process designed for DAC-SASH.

The CARE and FERA income eligibility requirements, in general, are more restrictive than the income requirements for SASH, which allows for participation of households with incomes up to 80 percent of area median income. Because the DAC-SASH program allows for participation of homes that are not deed-restricted, however, we believe that the more stringent income eligibility requirement is appropriate to ensure that program resources are used to benefit households with the most need of assistance.

5.4.1. DAC-SASH Funding

As recommended by TURN, the DAC-SASH program will have an annual budget of $10 million per year beginning on January 1, 2019, and continuing through the end of 2030. At the same time, we reject TURN's proposal that DAC-SASH be funded through the CARE Program budget. Instead, within 60 days of the effective date of this decision, PG&E, SCE, and SDG&E shall each file Tier 1 Advice Letters to create memorandum accounts to track the start-up costs for the DAC-SASH program. The Commission will review these start-up costs in the companies' next Energy Resource Recovery Account (ERRA) compliance proceedings. In addition, PG&E, SCE, and SDG&E will establish balancing accounts to collect the $10 million per year DAC-SASH budget starting in 2019, and should propose a method for collecting these costs through distribution rates. The Commission will address those balancing account costs in each utility's GRC proceedings through the conclusion of the program in 2030. Money not allocated to specific projects or program expenses by the program

end date of December 31, 2030, will be returned to ratepayers at the conclusion of the program.

5.4.2. Program Administration

We believe that the administrative structure of the SASH program provides a reasonable model for the administration of DAC-SASH. This section discusses the administrative structure for the program as a whole, outlines the major activities for which the PA will be responsible, describes the competitive bidding process that will be used in choosing a program administrator, and provides for periodic evaluation of the program.

5.4.2.1. Administrative Structure

For the past ten years, SASH has been administered by a single, statewide program administrator that operates the program in the territories of PG&E, SCE, and SDG&E. Our experience with SASH demonstrates that a non-utility PA can successfully manage a program of this type across different utility service territories, while keeping administrative costs reasonable. Based on this experience, we chose to use a single program administrator, chosen through a competitive bidding process, for the SOMAH program adopted in D.17-12-022. A single statewide PA will also be able to coordinate marketing and education efforts, ensuring consistent messaging to and treatment of potential participants. Such a structure should simplify communication about the program and make it more accessible to participants. For these reasons, we choose to have a single PA oversee this program statewide.

5.4.2.2. Major Responsibilities of the Program Administrator

In general, the PA will be responsible for ensuring that all participants in DAC-SASH meet all program requirements. Toward this end, the PA will

establish and then implement a process for documenting the eligibility of all program applicants. In addition, the PA will develop processes for verifying the quality and completeness of work performed under the program, and will be experienced in service delivery. Specifically, the PA shall be responsible for the development and management of the program, including but not limited to the following activities.

1. Development of **program materials and procedures**, including:
    a. Digital application forms and procedures;
    b. Eligibility documentation requirements;
    c. Data collection methods, digital forms, and databases;
    d. Outreach materials (in coordination with statewide education and outreach efforts, as described in D.16-03-029 and D.16-09-020);
    e. Incentive payment procedures; and
    f. A DAC-SASH program Handbook, which we anticipate will contain information comparable to the current SASH Handbook.
2. General **program management**, including:
    a. Supporting the Commission's Energy Division throughout the DAC-SASH program, including assisting with reports, public comment process, meetings, workshops, and evaluation activities and other activities as specified in its contract.
    b. Establishing relationships with low-income single-family homeowners and community-based organizations that serve those populations.
    c. Building organizational capacity to meet the demands of a statewide program;
    d. Exploring other funding options with corporations and government agencies;

e. Reviewing applications and making eligibility determinations, including collection of documentation of property and participant eligibility, and compliance of proposed projects with program rules;

f. Providing customer support, including responding to complaints, problems, and maintenance needs;

g. Providing technical assistance with the application processes;

h. Collecting and facilitating access to program resources;

i. Partnering and working with solar installers to install PV on target homes, and partnering with appropriate entities to develop "green job" training or other workforce development programs;

j. overseeing compliance with program requirements (for example, ensuring that job training, energy efficiency, and other requirements are met); and

k. processing incentive claims.

3. **Data Collection and Reporting** on program operation and outcomes, such as:

a. Collection of data on program operations, including but not limited to applicants' eligibility information, project proposals, tracking of project status, MW developed through the program, and incentives paid;

b. Collection and reporting of data on the number of training participants and hours, as well as the amount of local labor, provided by DAC-SASH projects;

c. Meeting all reporting requirements developed by the Commission's Energy Division staff, including posting data on http://californiadgstats.ca.gov.

5.5. Implementation Plan and Next Steps

5.5.1. Selection of a Program Administrator

Based on our determination that DAC-SASH should have a single state-wide PA, we find that selection of a PA should be made through a

competitive bidding process. Specifically, the Commission's Energy Division will select the Program Administrator through an RFP process managed by PG&E on behalf of the Commission. The RFP process shall be led by staff from the Commission's Energy Division, and Energy Division will make the final decision on the winning bidder and will select one utility to contract with the winning bidder. In making this determination, Energy Division shall take into consideration the following factors:

1. Experience with service delivery in a similar program(s) - by directly or through partners or subcontractor(s), delivering services for engineering, designing, procuring, installing, testing and commissioning of photovoltaic (PV) systems in multifamily buildings;
2. Databases and IT – Demonstrated successful management of federal, state, and/or local funds; with the ability to track and comply with specific programmatic and audit requirements of multiple funding sources. Maintain a system of internal accounting and administrative control; demonstrate a history of fiscal stability and responsibility;
3. Workforce development and tracking – Experience documenting and reporting workforce participation goals with a track record of providing training in solar installation procedures. Training experience could include training outside entities, formal in-house training, or developing training curricula and may include knowledge of, and demonstrated coordination with, existing utility and other statewide workforce, education, and training programs and pathways;
4. Technical assistance - Experience with the decision-making, finance, capitalization, and other relevant characteristic of low-income communities or consulting services in the fields of home construction, improvement, or renovation of residential properties, with a focus on

weatherization, energy efficiency, and photovoltaic standards;

5. Application review and eligibility verification; and
6. Data Reporting.[28]

We direct PG&E to support the selection of a statewide administrator through an RFP process selection and manage the RFP process on the Commission's behalf to assist in expediting the process. Commission staff will play a central role in developing the RFP and will make the final decision on the winning bidder. The RFP process will be concluded and PG&E will sign a contract with the chosen PA by August 30, 2018, unless a different date is determined through a letter from the Director of the Commission's Energy Division. Energy Division will serve notice of the release of the RFP and of the winning bidder on the service list for this proceeding.

5.5.2. Program Implementation via a Tier 3 Advice Letter

Once chosen, the PA shall be responsible for developing program rules and procedures consistent with the policies and guidance contained in this decision. This decision, including Appendix A, establishes broad policies for program eligibility, additional program requirements (*e.g.*, for third-party ownership, job training, and energy efficiency services), and program operation. Once selected, the PA shall hold one or more workshops with interested parties to receive input on appropriate methods for implementing the program, within the policy guidance provided here. In addition, we direct the utilities to enter into appropriate non-disclosure agreements with the chosen PA, if necessary to

[28] The information provided in Appendix A of D.08-10-036 is also available to Energy Division staff to use in developing criteria for the RFP for the PA.

facilitate the sharing of customer usage data and other personally identifiable information needed for the operation and administration of DAC-SASH. Based on stakeholder input, the PA shall propose a plan for implementing and operating DAC-SASH in compliance with this decision. Not later than November 30, 2018, the PA shall submit a Tier 3 implementation Advice Letter that includes a DAC-SASH Program Handbook for Commission consideration, subject to approval in a formal resolution. If appropriate, the Commission's Energy Division may modify the due date for this advice letter. The program implementation proposal shall include sections on at least the following subjects:

1. Application procedures;
2. Requirements for documentation of building, and project eligibility;
3. A program budget that includes line items for incentives and administrative activities, including but not limited to marketing, education, and outreach;
4. Specific job training requirements consistent with those discussed in Appendix A;
5. Specific energy efficiency requirements consistent with those adopted in Appendix A; and
6. Data collection and reporting requirements, including report formats.

The Commission may provide further direction on the contents of this Tier 3 implementation Advice Letter through one or more future Commission decisions or resolutions. Once the DAC-SASH Program Handbook is adopted, the PA may propose program adjustments to the Program Handbook via a Tier 2 Advice Letter. The assigned Commissioner and/or ALJ will determine if suggested program changes require modification of a Commission order, and if

so, the change would be considered by the full Commission, following notice to parties and an opportunity to comment.

5.5.3. Measurement and Evaluation

Every three years beginning in 2021, Energy Division shall select an independent evaluator through an RFP process similar to that used to select the Program Administrator. The consultant hired through this process will evaluate the effectiveness and efficiency of both the PA and the DAC-SASH program overall. Specifically, the Commission's Energy Division will select the independent evaluator through an RFP process managed by SDG&E on behalf of the Commission. The RFP process shall be led by staff from the Commission's Energy Division, and Energy Division staff will make the final decision on the winning bidder.

If appropriate based on the program evaluation, the Commission may choose to modify program elements including, but not limited to, incentive levels and job training, local hiring, and energy efficiency requirements. Similarly, if necessary based on poor performance by the initial PA, the Commission may decide to choose a new PA using a competitive bidding process comparable to the one described in Section 5.5.1.

5.5.4. Energy Division Budget and Activities

Up to $500,000 per year from the program budget may be used to reimburse Energy Division for activities related to implementation and oversight of the DAC-SASH program. Activities funded by this budget will include, but may not be limited to, any Energy Division activities related to the competitive bidding processes required in this decision and all evaluation, measurement, and verification activities.

As discussed elsewhere in this decision, Energy Division staff will make the final determinations on the selection of a Program Administrator and a separate evaluation consultant through competitive bidding processes. The utilities and the PA will work with Energy Division in the development of implementation procedures, and Energy Division staff may hold or direct the utilities and PA to hold workshops to gather input on DAC-SASH rules and operations. Utilities and the PA will also work with Energy Division staff to develop reporting requirements. Energy Division may modify such reporting requirements and formats when necessary to ensure effective oversight of DAC-SASH and to gather data on the program's operation and outcomes as necessary to inform the periodic program reviews.

6. Green Tariff Program for DACs

In addition to proposals for the expansion of SASH-like programs to serve residential customers in DACs, several parties proposed variations of an expanded Green Tariff program, modeled on existing Green Tariffs operated by PG&E, SCE, and SDG&E.

6.1. History of the Green Tariff Program

SB 43 (Wolk) (S. 2013, ch. 413) enacted the Green Tariff Shared Renewables (GTSR) Program, which is intended to (1) expand access "to all eligible renewable energy resources to all ratepayers who are currently unable to access the benefits of onsite generation," and (2) "create a mechanism whereby institutional customers…commercial customers and groups of individuals . . . can meet their needs with electrical generation from eligible renewable energy resources."[29] The

[29] Section 2831.

statute further states that the GTSR Program should facilitate development of renewable resource projects located close to the source of demand.[30] The GTSR program is designed to allow PG&E, SCE and SDG&E customers to receive 50 percent- 100 percent of their electricity demand from solar generation. The program has a capped enrollment of 600 MW statewide.

One portion of the authorizing statute dedicates a portion of the GTSR program to residents of DACs, defined for the purposes of the programs adopted pursuant to SB 43 as the top 20 percent of DACs in each utility service territory. Projects developed under Section 2833(d)(1)(a), known as the Environmental Justice Reservation for GTSR, must be between 500 KW and 1 MW in size. Section 2833(d)(1)(A) requiring the Environmental Justice reservation states:

> One hundred megawatts shall be reserved for facilities that are no larger than one megawatt nameplate rated generating capacity and that are located in areas previously identified by the California Environmental Protection Agency as the most impacted and disadvantaged communities. These communities shall be identified by census tract, and shall be determined to be the most impacted 20 percent based on results from the best available cumulative impact screening methodology designed to identify each of the following:
>
> (i) Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation.
>
> (ii) Areas with socioeconomic vulnerability.

At the same time, however, the statute requires that the costs of GTSR tariffs adopted pursuant to SB 43 may not be borne by customers who do not elect GTSR service. Because of this, program costs may not be shifted to

[30] Section 2833(p).

non-participating customers, so customers that sign up for a GTSR tariff or project often pay a premium over their otherwise applicable rate.

D.15-01-051 began the implementation of SB 43 and set forth the parameters of the program and implementation steps. As adopted, the GTSR program has two components: the "Green Tariff" and the "Enhanced Community Renewables" program. Under the Green Tariff, a customer may pay the difference between their current generation charge and a charge that reflects the cost of procuring 50 percent to 100 percent solar generation for their electricity needs. Under Enhanced Community Renewables, a customer agrees to purchase a share of a local solar project directly from a solar developer, and in exchange will receive a credit from their utility for the customer's avoided generation procurement and for their share of the benefit of the solar development to the utility.

Under D. 15-01-051, each renewable installation participating in GTSR must generate between 500 watts and 20 MW of electricity. Generation projects participating in the Green Tariff program are chosen through a competitive Request for Offers (RFO) process, and enter into a Power Purchase Agreement with the utility serving the area in which the project operates. Under the Green Tariff option, the costs for generation used by a customer are passed through by the utility to that customer. As a result, customers maintain their utility service and billing, and have no direct contractual relationship with the developer or operator of the generation project. This is in contrast to the Enhanced Community Renewables portion of the GTSR programs, in which customers pay the developer of the renewable resource to which they subscribe directly for the energy they use.

6.2. Utility and TURN Proposals for DACs Green Tariff Program

Several parties[31] recommend either extending or modifying the Green Tariff program as one potential way to encourage solar development in DACs. TURN calls its Green Tariff proposal the Renewable Energy for All Program. As noted above, customers participating in currently existing Green Tariffs pay a premium for energy received through the program to cover the costs of development of participating renewable resources. Under TURN's proposal, energy procured for the Environmental Justice Reservation component of the GTSR program would be made available to low-income DAC residents at no rate premium. Specifically, TURN proposes using a portion of the IOUs' GHG allowance proceeds set aside for clean energy programs pursuant to Section 748.5(c)(6) to buy down the premium costs of participation in the IOUs' Green Tariff programs for low-income customers living in DACs.

The Renewable Energy for All Program would pay for any net costs associated with subscriptions by participating low-income customers to GTSR generating facilities comprising the Environmental Justice Reservation portfolio. The funds for the Renewable Energy for All Program would also be used to offset the rate premium costs for participation in the GTSR program so that participating low income customers do not experience any bill increases due to their subscription to the program.

TURN contends that the Commission has sufficient authority under current law to adopt the Renewable Energy for All Program, and argues that this

[31] Proposals were received from PG&E, SCE, SDG&E, and TURN with supporting comments filed by ORA, TASC, CUE.

Program would extend access to clean energy to all low-income residents of DACs. TURN also asserts that Renewable Energy for All will provide predictable bill savings through bill credits to participating customers because the Green Tariff rate structure would be determined at the time of enrollment. For this reason, the program would provide more predictable savings than would be likely from on-site solar installations, which are more directly impacted by changes in the retail rate structure. The subsidy for participating customers would be transparent and easily quantified, which TURN prefers to what it sees as hidden cost shifting to nonparticipating customers that occurs under net energy metering.

Like TURN, all three large IOUs propose some variation of a Green Tariff program. SCE, for example, proposes a DAC Community Clean Energy program to leverage the GTSR programs' general structure. Although the current GTSR program has a DAC project set-aside, SCE has observed low GTSR program subscriptions in DACs because GTSR subscribers often experience bill increases, and many DAC residents cannot afford the "above market" costs of participating distributed energy resources (DERs) that may be charged to participating customers. To enhance those benefits, SCE proposes to also give program enrollees a 10 percent discount on their bill. SCE suggests that the 10 percent discount approximates the bill savings experienced by NEM customers outside of DACs. Under SCE's proposal, participation in the DAC Community Clean Energy program would be available to CARE customers in DACs. SCE would phase in the program, limiting initial participation to the most adversely affected customers who would benefit most from the program, such as high usage CARE customers.

To cover these benefits to participating customers, SCE proposes to initially fund the program with any available GHG allowance revenue funds not already dedicated to the Commission's implementation of AB 693. Recognizing that those funds will likely not be sufficient to cover a robust program, SCE also recommends that the Commission and the utilities jointly encourage the Legislature to earmark monies from the Greenhouse Gas Reduction Fund (GGRF) for this program. Alternatively, SCE requests that the Commission provide guidance on how SCE can recover expenditures associated with the DAC GTSR program through rates, such as an advice letter process with a memorandum account to track expenditures. Because it depends on external sources of funding, SCE asserts that its proposal will allow customers in DACs to support DERs without associated bill increases. Regardless of the funding mechanism, SCE suggests adopting a program cap of 70 MW, which would be incremental to the 45 MW of solar reserved for DAC customers under the GTSR program.

SDG&E proposes the SolarAll program to build on the Green Tariff component of GTSR, as a way of promoting the adoption of renewables in DACs and increasing program affordability for a subset of low-income customers. SDG&E proposes to leverage the Environmental Justice Reservation associated with its existing Green Tariff offering (branded currently as "EcoChoice"), to grow solar adoption among DAC CARE customers without further adding to solar procurement or incurring additional costs for ratepayers.

SDG&E proposes that customers participating in the SolarAll program must first enroll in its Schedule GT, the governing tariff for the Green Tariff

component of the GTSR program.[32] Only CARE customers in DACs would be eligible for SolarAll. Once enrolled on Schedule GT, CARE customers in DACs would not need to take further action to participate in SDG&E's new SolarAll program. Participants would be automatically enrolled in the SolarAll program if they reside in a DAC[33] and are currently enrolled in SDG&E's CARE program.

SDG&E would provide up to 100 percent renewable energy to customers that qualify for the SolarAll program without charging them the typical Green Tariff rate premium. The otherwise applicable charges for renewable energy as outlined in Schedule GT would be offset with an equivalent credit provided by a new tariff, Schedule SolarAll, which would be applied to all qualifying Green Tariff participants in Schedule SolarAll.

Similarly, PG&E proposes a Solar CARE Plus program that it asserts will spur solar growth among low-income customers within DACs. Under PG&E's proposal, the Solar CARE Plus program would provide eligible customers the opportunity to have 100 percent of their annual electric usage supplied at no cost premium by a pool of solar projects sited in DACs, and would further offer participating customers a bill credit of 1.5 cents per kilowatt-hour, which represents approximately 10 percent of the average electric rate for CARE customers.

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[32] For Schedule GT, an eligible customer is currently defined as a bundled utility customer in SDG&E's service territory who: (i) does not procure its electricity directly from electric service providers (ESPs) as defined in Rule 1; (ii) does not take service under Schedule NEM, NEM-V, RES-BCT or any other distributed generation tariff; (iii) is not a CCA or member of a CCA; or (iv) is not currently participating in a pilot rate program.

[33] SDG&E proposes to define a DAC for the purpose of this Program as being located in a census tract which falls in the top 25 percent of the CalEnviroScreen 3.0 tool's (or a successor tool's) tracts within SDG&E's territory.

The proposed program would be open to CARE-eligible customers located in the top 25 percent of impacted census tracts in PG&E's service territory as determined by the CalEnviroScreen 3.0 tool. Participants would enroll to have 100 percent of their annual usage provided by a pool of solar projects sited in DACs. Participants would continue to take service on the CARE rates, and both their program premium and the additional 1.5 cents per kilowatt-hour credit would be fully subsidized.

PG&E proposes that participating generation installation should be between 500 watts and 20 MW in size, and the program size would be capped at 70 MW in its territory. The 70 MW procured for this program would be separate from and incremental to the 45 MW of solar facilities reserved for service to customers in DACs in PG&E's SB 43 GTSR Program. PG&E estimates the program would cost $5 million per year, to be funded from sources outside of rates, such as the Greenhouse Gas Reduction Fund.

6.3. Comments on Utility and TURN Proposals for DAC Green Tariff Program

ORA supports the three utility proposals to modify and leverage the existing GTSR Program framework and recommends the Commission adopt the proposals, with some modifications, as part of a five-year pilot with study and evaluation after the second and fifth year. Specifically, ORA recommends that the Commission modify the PG&E and SCE proposals so that all participants in a DAC Green Tariff program receive credits to offset the GTSR cost premium, and half of each company's participants also receive an additional 10 percent bill credit. ORA supports adoption of the SDG&E proposal as a five-year pilot

without additional modifications.[34] ORA further suggests that the 10 percent discount suggested in the PG&E and SCE proposals should be a starting point, and recommends that the Commission consider increasing the discount for low-income customers in DACs. ORA also recommends that funding for the GTSR proposals be limited to the utility GHG allowance proceeds set aside for clean energy and energy efficiency projects.

GRID Alternatives generally supports the four proposals, and particularly supports two aspects of the PG&E SolarCARE Plus option: that it does not require participating customers to make a long-term commitment to the program, and that it allows for project bids to be ranked on multiple factors. GRID Alternatives notes that under PG&E's SolarCARE Plus proposal, customers do not sign a long-term contract or agreement, and so can enter or leave the program at any time. As a result, participation in the program does not create any financial risks to customers, but still provides customer savings. GRID Alternatives agrees with ORA that the 10 percent savings proposed by PG&E should be considered a starting point, with the possibility that the program could be modified to provide greater savings in the future. In support of its suggestion that the Commission consider providing greater savings, GRID Alternatives notes the SASH TPO model requires a minimum of 50 percent bill savings for participants.

In contrast, MCE recommends that PG&E's Solar CARE Plus proposal should be rejected because it is only available to bundled customers. MCE argues that this restriction may encourage unbundled customers to opt out of

[34] ORA Reply Comments filed May 25, 2017, at 1-4.

CCA services. MCE suggests that allowing this program for bundled customers only may conflict with the requirement of Section 707(a)(4)(A), which directs the Commission to foster fair competition. Alternatively, MCE argues that if the Commission intends to approve PG&E's Solar CARE Plus Program, the proposal should be modified to recover costs from PG&E's bundled customers only, since program eligibility would be limited to those customers.

MASH Coalition opposes the GTSR proposals for two main reasons. First, MASH Coalition asserts there is at best a small economic benefit to participants. Second, MASH Coalition argues that the Green Tariff proposals do not provide the opportunities for community engagement with renewable energy that they see as being at the heart of AB 327's DAC mandate. MASH Coalition argues the DAC requirements of Section 2827.1(b)(1) must be considered within the context of the net energy metering program, and therefore should focus on distributed energy generation installed on the customer side of the meter. The Green Tariff proposals, by contrast, involve opting into a utility-owned portfolio of generating facilities, and would not provide individual connections between specific communities and renewable energy generation installed in those communities.

Greenlining supports the goal of 10 percent bill savings. However, it does not support PG&E's proposal to limit participation exclusively to CARE-eligible residential customers in DACs. Greenlining suggests broadening the eligibility to include non-residential customers like small businesses, community-based organizations, schools and libraries as well as higher income residents. Greenlining also opposes PG&E's proposal for program funding from the GGRF, asserting that the Commission does not have legal authority to allocate GGRF funds in this proceeding because those funds must be appropriated by the

legislature. Greenlining also questions whether this program is the best use of the GHG allowance proceeds and, as with SCE, requests the Commission provide guidance on more appropriate funding sources for this program.

TASC supports the concept of a Green Tariff program that allows IOUs to leverage Public Purpose Program or GGRF to subsidize clean power for low-income customers in DAC areas, and specifically supports PG&E's and SCE's proposals to provide a fixed bill credit of 1.5 cents per kilowatt-hour to participating customers. TASC believes the DAC Green Tariff should have two eligibility requirements: customers would be CARE-eligible and located in DACs. TASC encourages the Commission to adopt participation caps based on those in each IOU's proposal and allow for a programmatic check-in, and corresponding cap expansion, at a time that leaves sufficient opportunity to ensure program continuity. At the same time, however, TASC contends that adopting variations on the existing GTSR program is not an appropriate substitute for customer-generated solar power or co-located community solar.

CSE objects to the four proposals for several reasons. CSE does not believe that these proposals will significantly expand the adoption of solar among DAC residential customers, and does not address GRID Alternatives' recommended guiding principles for DAC programs. Although the degree of benefits accruing to residential customers in DACs among the four proposals varies, CSE believes that at best these proposals would result in minimal customer savings. Furthermore, CSE notes that to buy-down the premium for DAC residential customers, each proposal relies on proceeds from the auction of GHG allowances under California's cap-and-trade program. CSE argues that the uncertainty of auction proceeds will send unreliable signals, creating confusion among market participants. Because of this and what it perceives as a lack of meaningful bill

savings to reduce the low-income customers' energy burden, CSE believes these proposals should be rejected by the Commission.

In addition to these concerns, the Joint Solar Parties and CEJA argue that low-income subscribers are likely to achieve greater savings from clean energy via community solar expansion than they would receive via proposed GTSR variations because limited available funding means the Commission will likely aim to be efficient with those dollars and keep subscriber savings relatively low. These parties also contend that under a modified GTSR program, as proposed by the utilities and TURN, customers cannot subscribe to a specific project, nor is there an obvious means for community control or ownership of projects.

6.4. Adoption of a DAC-Green Tariff

We recognize that a Green Tariff for DACs may not provide a visible connection between DAC customers and specific solar installations in their communities. At the same time, we find that the Green Tariff proposals address many of the other goals for DAC programs identified by parties to this proceeding, and will provide an option for low-income customers to be able to afford and have access to a program similar to one that exists for other customers. Specifically, a Green Tariff accompanied by a suitable discount would provide low-income customers with cost savings, while making renewable generation more broadly available to both homeowners and renters in single-family and multifamily housing in DACs. In addition, we find that it is reasonable to provide multiple options for customers in DACs to gain access to clean energy resources. For some of these households, a modified Green Tariff program may be the best option. For these reasons, we adopt a Disadvantaged Communities – Green Tariff (DAC-Green Tariff) program as described in this

section, and require PG&E, SCE, and SDG&E to implement such a tariff through an Advice Letter filing, as discussed below.

At this time, renters in single-family homes have few options to participate in a solar program outside of one of the existing GTSR programs. As Greenlining and others note, many GTSR options are premium-price products, which may be cost-prohibitive and create a barrier to participation for low-income and disadvantaged community residents. As PG&E and others point out, a DAC-Green Tariff option would overcome many of the barriers to solar adoption for low-income customers within DACs that are not effectively addressed by existing programs. In particular, these options would address economic barriers (e.g., low customer credit ratings), property ownership barriers (e.g., renters cannot directly adopt rooftop solar), property structure issues (e.g., poor roof condition or sub-optimal roof orientation) and marketing and outreach barriers (e.g., multi-lingual marketing challenges).

To provide low-income customers in DACs the opportunity to access the benefits of GTSR programs and provide multiple green energy options for these customers, we are adopting the DAC-Green Tariff program. The DAC-Green Tariff program will be available to CARE- and FERA- eligible customers in the top 25 percent of DACs statewide based on CalEnviroScreen. The three utilities and TURN all propose that the project size for a DAC-Green Tariff program should align with the current Green Tariff, which allows for projects between 500 KW and 20 MW. We find that it is reasonable to maintain consistency between project size for the DAC-Green Tariff and the existing Green Tariff option.

We will base a new DAC-Green Tariff program on the Green Tariff portion of the GTSR, as follows:

- The IOU executes a Power Purchase Agreement with a developer for a solar project;
- The project is selected through a competitive solicitation;
- There is no direct relationship between the customer and the project developer;
- Subscribing customers receive 100 percent renewable energy; and
- Subscribing customers receive a defined bill credit.

This program will be in addition to, rather than part of, the existing Green Tariff program, and will be available only to low-income residential customers in DACs, defined as those customers meeting the qualifications for CARE or FERA. The following sections outline the specific modifications to the existing Green Tariff that we adopt for these customers. PG&E, SCE, and SDG&E will implement the DAC-Green Tariff program each by filing a Tier 3 Advice Letter within 60 days of the effective date of this decision.

6.4.1. Twenty Percent Bill Reduction

We agree with ORA and GRID Alternatives that savings greater than the 10 percent discount proposed by SCE and PG&E are appropriate to provide meaningful savings for low-income residential customers in DACs. GRID Alternatives points out that Navigant Consulting – the third-party program evaluator for the SASH/MASH programs – found that the top motivator for low-income families to participate in the SASH program was financial, with over 75 percent of SASH participants surveyed indicating that the reduction in their electric or utility bills was their primary reason that they participated in the low-income solar program.

In order to provide meaningful bill savings to reduce customers' energy burdens, we find that it is reasonable to provide a large enough discount to

encourage low-income customers in DACs to consider green options. In order to provide a meaningful benefit to participating customers, we will set the discount level at 20 percent, but we apply the discount only to the generation portion of customers' bills.

6.4.2. Participation Caps

PG&E asserts that the addition of 70 MW in its service territory would result in roughly equivalent renewable energy adoption rates between CARE and FERA customers in DACs and non-DAC customers. We find this to be a reasonable cap for PG&E. We will also set the same 70 megawatt cap for SCE, and an 18 megawatt cap for SDG&E (based on the approximate relative size of SDG&E to PG&E). Once the cap is met for any utility, we will re-evaluate whether to modify the program.

6.4.3. Project Location Requirements

The three IOUs and TURN propose that projects could be located in any DAC within the same IOU service territory as the customers. We agree that there is no need for stricter location restrictions than these.

6.4.4. No Mandatory TOU Requirement

SCE and TASC suggest that mandatory TOU can pose financial uncertainty for customers and potentially mute any economic benefits from a DAC-Green Tariff program. PG&E proposes that DAC-Green Tariff customers should not be required to go onto TOU rates because it is not a NEM program and there is no mandatory TOU requirement for the existing Green Tariff program. D.16-01-044 required that every residential customer interconnecting pursuant to the net energy metering successor tariff be placed on an appropriate and available time of use rate to improve customers' responsiveness to demands on the grid, which is especially important since NEM customers make a one-time

decision on the orientation of their solar PV systems. In D.17-12-022, our recent decision adopting the SOMAH program, we found it reasonable to exempt tenants participating in SOMAH from the requirement that applies to other customers using the NEM successor tariff to take service under a TOU rate. This is consistent with the requirements of AB 693, under which the Commission must ensure participating customers are protected from higher rates as a result of being a part of the program.

We find that the same logic that applies for the NEM successor tariff customers, who are installing a solar system, does not apply to the DAC-Green Tariff program subscribers. In addition, it is not appropriate to require low-income customers to be on a TOU rate for the DAC-Green Tariff, when other customers on the existing Green Tariff do not have the same requirement. Accordingly, we will not require that DAC-Green Tariff customers be on TOU rates.

6.4.5. Funding Source

Most parties propose using either GGRF funds or the portion of GHG auction revenue funds set aside for clean energy programs to fund a DAC-Green Tariff program. MCE argues that because the DAC-Green Tariff would only be open to bundled customers, the use of GHG auction proceeds would not be appropriate because those funds are intended to benefit both bundled and unbundled customers.

We have concerns about the use of GHG auction revenue funds for this program. First, unlike SOMAH, which is funded by allowance proceeds and is available to the customers of PacifiCorp and Liberty Utilities, we are not making this program available to the customers of the small and multi-jurisdictional energy utilities that have significant allowance proceeds. In this instance, we are

not requiring implementation of this program in the PacifiCorp and Liberty Utilities service territories because the statute only requires the three large utilities to adopt successor tariffs. Second, a majority of the 15 percent of GHG auction proceeds set aside for clean energy and renewable projects have already been allocated by statute for use in SOMAH. Instead, PG&E, SCE, and SDG&E shall file Tier 2 Advice letters within 30 days of the adoption of this decision to create DAC-Green Tariff balancing accounts. The companies will track all costs related to the implementation and operation of the DAC-Green Tariff program in these balancing accounts. These balancing accounts will be reviewed in each company's future ERRA compliance proceedings. In addition, each company will file an application for review of the DAC-Green Tariff Program not later than January 1, 2021. Those applications will include a review of both the program's costs and benefits, and may result in revisions to the tariff, if appropriate.

7. Proposals for Future Consideration

We decline to adopt a variation of parties' proposals for a community solar option at this time. Several parties proposed variations of Community VNEM, under which a third party developer could contract directly with community members to serve customers in a specific area with renewable generation. These proposals raise potential legal and practical issues, including ways to guarantee long-term participation sufficient to make projects viable, and the need for specific consumer protections to guard against potential bankruptcy or other failure to meet commitments by developers. We also note that the existing Enhanced Community Renewables (ECR) Program adopted pursuant to SB 43, which is the existing program most comparable to these community solar options, has not been successful in encouraging solar development. As of the

end of 2017, one utility has requested discontinuing its ECR program[35]. We acknowledge that this lack of success may reflect the fact that ECR is often a premium program for participants, and if so, the use of incentives or other mechanisms to offset the premium costs might result in a more successful program. Still, we simply do not have a proven model for this type of program, and given the uncertainties of developing and implementing a program that addresses the many customer protection, securities law, and other issues already identified with community solar, we find it unlikely that such a program would result in a significant increase in the adoption of solar in DACs in the near future.

We also decline to adopt SCE's suggested pilot on paired solar and energy storage. In D.17-12-005, we adopted rules that will allow the use of energy storage with VNEM installations, whether or not they are located in DACs. Given this, we do not see the need for separate pilot to test out this type of program focused on DACs.

We do not rule out the possibility of adopting additional options for DACs in the future. In particular, we are open to considering future community solar proposals that provide clear avenues for uniform community decision-making on participation, can be financeable, and provide adequate consumer protections. We also encourage parties to develop and propose other innovative approaches for increasing access to renewable generation in DACs.

8. Comments on Proposed Decision

The proposed decision of the ALJs in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were

[35] On December 22, 2017, SCE filed Advice 3722-E titled "Request to Terminate Southern California Edison Company's Green Tariff Shared Renewables Program" with the Commission.

allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on _____ by _____. Reply comments were filed on _____ by _____.

9. Assignment of Proceeding

Martha Guzman Aceves is the assigned Commissioner and Jessica T. Hecht, Valerie U. Kao, and Mary McKenzie are the assigned ALJs and Presiding Officers in this proceeding.

Findings of Fact

1. Section 2827.1(b) directs the Commission to develop a standard contract or tariff applicable to customer-generators with renewable electrical generation, as a successor to then-existing Net Energy Metering tariffs.

2. Section 2827.1(b)(1) requires the Commission to develop specific alternatives designed to increase in adoption of renewable generation in DACs.

3. The original NEM tariff and its successor adopted in D.16-01-044 were not designed to address the specific barriers to adoption of renewable distributed generation experienced in DACs.

4. The incentives provided in the NEM tariffs, including compensation at the full retail rate for exported energy and exemption from all charges imposed on other residential customers, have not been sufficient to ensure adoption of renewable distributed generation in DACs.

5. The CalEPA in partnership with the OEHHA, created the CalEnviroScreen tool to identify DACs; the current version of CalEnviroScreen is CalEnviroScreen 3.0.

6. CalEPA and the CARB have used CalEnviroScreen to fulfill the legislative requirement of identifying DACs for purposes of distribution of certain funds from the Greenhouse Gas Reduction Fund.

7. Financial barriers, including the lack of capital for an initial down-payment or lack of access to credit, pose a significant barrier to solar adoption for low-income households in DACs.

8. The SOMAH program, adopted in D.17-12-022, provides an avenue for certain low-income customers to access clean solar electric generation, with a special provision to increase solar installation in DACs.

9. SASH provides a proven and successful model for expanding access to solar among low-income customers and for providing additional, non-energy benefits, such as job training.

10. Use of a single, statewide program administrator will improve consistency in program implementation and simplify communication about the program with potential participants.

11. A competitive bidding process utilizing an RFP is an appropriate mechanism for use in the selection of the DAC-SASH program administrator.

12. The Commission should choose a statewide PA for DAC-SASH through a competitive bidding process let by Energy Division.

13. Creation of a memorandum account will assist in tracking of DAC-SASH implementation costs.

14. Creation of a DAC-SASH balancing account will facilitate the collection and tracking of DAC-SASH budgets.

15. Renters in single-family homes currently have few options to participate in a solar program outside of one of the existing GTSR programs.

16. A DAC-Green Tariff will provide low-income customers with affordable access to a clean energy tariff program similar to one (GTSR) that is available to other customers, but may be cost-prohibitive for low-income DAC residents.

17. A Green Tariff that provides a 20 percent discount off the generation portion of participating customers' bills will make renewable energy more affordable for low-income customers.

18. Creation of a DAC-Green Tariff balancing account will facilitate tracking the costs of the DAC-Green Tariff.

19. The DAC-Green Tariff is not a NEM program, and there is no mandatory TOU requirement for the existing Green Tariff program.

Conclusions of Law

1. Public Utilities Code Section 2827.1(b)(1) requires the Commission to ensure that customer-sited renewable distributed generation continues to grow sustainably and include specific alternatives designed for growth among residential customers in DACs.

2. H&S Code Section 39711 required the CalEPA to create a process for identifying DACs for purposes of investment of funds from the GHG Reduction Fund.

3. It is reasonable to define a "disadvantaged community" for the purpose of the options adopted in this decision as a community that is identified, by using CalEnviroScreen 3.0 or its successor, as among the top 25 percent of communities statewide. In addition, 22 census tracts in the highest 5 percent of CalEnviroScreen's Pollution Burden, but that do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data, are also designated as DACs.

4. It is reasonable to target programs in DACs towards low-income customers.

5. It is reasonable to provide a variety of options for low-income households similar to the set of options already available to other customers.

6. The requirement in Section 2827.1(b) to ensure that the total costs of the NEM successor tariff are approximately equivalent to total benefits should not be applied in the development of alternatives for DACs.

7. It is reasonable to retain the structure and most program rules of the SASH program in a comparable program aimed at low-income single-family homeowners in DACs.

8. It is reasonable to require PG&E, SCE, and SDG&E to create memorandum accounts to track the start-up costs for the DAC-SASH program within 60 days of the effective date of this decision.

9. It is reasonable to adopt an annual DAC-SASH budget of $10 million per year beginning on January 1, 2019, and continuing through the end of 2030.

10. It is reasonable to require PG&E, SCE, and SDG&E to track the annual DAC-SASH budget of $10 million per year in balancing accounts starting in 2019.

11. It is reasonable to return DAC-SASH funding not allocated to specific projects or program expenses by the program end date of December 31, 2030, to ratepayers at the conclusion of the program.

12. The Commission should choose a statewide PA for DAC-SASH through a competitive bidding process led by Energy Division.

13. It is reasonable to adopt a Green Tariff that provides a 20 percent discount from the generation portion of participating customers' bills.

14. It is reasonable to require DAC-Green Tariff renewable generation projects to be located in any DAC within the same IOU service territory as customers.

15. It is reasonable to require PG&E, SCE, and SDG&E to create balancing accounts to track the costs of the DAC-Green Tariff program within 60 days of the effective date of this decision.

16. It is reasonable to review the DAC-Green Tariff balancing accounts in participating utilities' ERRA proceedings.

17. It is reasonable to require PG&E, SCE, and SDG&E to submit Advice Letters creating a DAC-Green Tariff rate within 60 days of the effective date of this decision.

O R D E R

IT IS ORDERED that:

1. The Disadvantaged Communities – Single-family Solar Homes program, as described in Sections 5.4 and 5.5 of this decision and summarized in Appendix A, is adopted, and shall operate from January 1, 2019, through December 31, 2030, in the service territories of Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company.

2. A single, statewide Program Administrator (PA) for the Disadvantaged Communities – Single-family Solar Homes program shall be chosen through a Request for Proposal (RFP) process, as outlined in Section 5.5.1. of this decision. Specifically, the Commission's Energy Division will select the PA through an RFP process managed by Pacific Gas and Electric Company (PG&E) on behalf of the Commission. The RFP process shall be led by staff from the Commission's Energy Division, and Energy Division will make the final decision on the winning bidder. The RFP process will be concluded and PG&E will enter into a contract with the chosen PA by August 30, 2018. The Energy Division Director may modify the August 30, 2018, deadline by letter for good cause.

3. Once selected, the Program Administrator shall hold one or more workshops with interested parties to receive input on appropriate methods for

implementing the Disadvantaged Communities – Single-family Solar Homes program consistent with the policy guidance provided in this decision.

4. Pacific Gas and Electric Company, San Diego Gas & Electric Company, and Southern California Edison Company may enter into an appropriate non-disclosure agreement with the chosen Program Administrator if necessary to facilitate the sharing of customer usage data and other personally identifiable information needed for the operation and administration of the Disadvantaged Communities – Single-family Solar Homes program.

5. The Program Administrator (PA) for the Disadvantaged Communities – Single-family Solar Homes (DAC-SASH) program shall propose a plan for implementing and operating the DAC-SASH Program in compliance with this decision. By November 30, 2018, the PA shall submit a DAC-SASH Program Handbook for Commission consideration as a Tier 3 Advice Letter, subject to approval in a formal resolution. The Energy Division Director may modify the November 30, 2018, deadline by letter for good cause. The program implementation proposal shall include sections on at least the following subjects:

a. Application procedures;
b. Requirements for documentation of building and project eligibility;
c. A program budget that includes line items for incentives and administrative activities, including but not limited to marketing, education, and outreach;
d. Specific job training requirements consistent with those discussed in Appendix A;
e. Specific energy efficiency requirements consistent with those adopted in Appendix A; and
f. Data collection and reporting requirements, including report formats.

6. The Program Administrator shall work with Energy Division to develop reporting requirements and formats, including but not limited to, reporting of data on projects approved and completed, incentives reserved and paid for installations, job training, local hiring, and coordination with clean energy programs. Energy Division may modify those requirements as needed to inform evaluation, measurement, and verification activities.

7. Every three years beginning in 2021, Energy Division shall select an independent evaluator through a Request for Proposal (RFP) process similar to that used to select the Program Administrator (PA). The consultant hired through this process will evaluate the effectiveness and efficiency of both the PA and the Disadvantaged Communities – Single-family Solar Homes program overall. Specifically, the Commission's Energy Division will select the PA through an RFP process managed by San Diego Gas & Electric Company on behalf of the Commission. The RFP process shall be led by staff from the Commission's Energy Division, and Energy Division staff will make the final decision on the winning bidder.

8. The Disadvantaged Communities – Single-family Solar Homes program shall have an annual budget of $10 million per year beginning on January 1, 2019, and continuing through the end of 2030. Each participating utility will contribute its proportionate share of this budget based on its relative percentage of retail electric revenue. Within 60 days of the effective date of this decision, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall each file a Tier 2 advice letters establishing a balancing account to collect its proportionate share of the $10 million per year DAC-SASH budget starting in 2019, and will collect those costs in its Energy Resource Recovery Account proceedings through the

conclusion of the program in 2030. Money not allocated to specific projects or program expenses by the program end date of December 31, 2030, will be returned to ratepayers at the conclusion of the program.

9. Up to $500,000 per year from the Disadvantaged Communities – Single-family Solar Homes program budget may be used to reimburse Energy Division for activities related to implementation and oversight of the DAC-SASH program. Activities funded by this budget will include, but may not be limited to, any Energy Division activities related to the competitive bidding processes required in this decision and all evaluation, measurement, and verification activities.

10. Within 60 days of the effective date of this decision, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall each file Tier 1 Advice Letters to create memorandum accounts to track the start-up costs for the DAC-SASH program. The Commission will review these start-up costs in the companies' next Energy Resource Recovery Account compliance proceedings.

11. The Disadvantaged Communities – Green Tariff program, as described in Section 6.4 of this decision, is adopted.

12. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall each file Tier 2 Advice letters within 30 days of the adoption of this decision to create DAC-Green Tariff balancing accounts. The companies will track all costs related to the implementation and operation of the DAC-Green Tariff program in these balancing accounts. These balancing accounts will be reviewed in each company's future Energy Resource Recovery Account compliance proceedings.

13. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall file Tier 3 Advice letters within 60 days of the adoption of this decision to create a DAC-Green Tariff rate.

14. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company will each file an application for review of the DAC-Green Tariff Program not later than January 1, 2021. That proceeding will include a review of both the program's costs and benefits, and may result in revisions to the tariff, if appropriate.

This order is effective today.

Dated _____, at San Francisco, California.

APPENDIX A

Disadvantaged Communities - Single-family Solar Homes Program

APPENDIX A

Disadvantaged Communities - Single-family Solar Homes Program

The Disadvantaged Communities – Single-family Solar Homes (DAC-SASH) program offers solar incentives to resident-owners of single-family homes in eligible disadvantaged communities. A disadvantaged community (DAC), for the purpose of the DAC-SASH Program, is a community that appears in the top 25% of census tracts statewide when using the CalEnvironScreen 3.0 tool[1]. In addition, 22 census tracts in the highest 5 percent of CalEnviroScreen's Pollution Burden, but that do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data, are also designated as DACs. The program will pay incentives towards a solar energy system that is defined as a solar energy device that has the primary purpose of providing for the collection and distribution of solar energy for the generation of electricity, that produces at least one kilowatt of electricity. Only eligible households may receive program incentives and are encouraged to apply.

The goal of the DAC-SASH program is to provide opportunities for existing low-income customers within disadvantaged communities to overcome barriers to accessing on-site, solar photovoltaic (PV) systems to decrease electricity usage and bills without increasing monthly household expenses. Public Utilities Code § 2871(b)(1) requires the Commission to "Ensure that the standard contract or tariff made available to eligible customer-generators ensures that customer-sited renewable distributed generation continues to grow sustainably and include specific alternatives designed for growth among residential customers in disadvantaged communities."[2]

Major Responsibilities of the Program Administrator

The Program shall be administered by one entity for all applicants within the service territories of PG&E, SCE, and SDG&E.

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[1] The Office of Environmental Health Hazzard Assessment, on behalf of the California Environmental Protection Agency, CalEPA, develops and updates the CalEnviroScreen tool to evaluate effects of pollution on vulnerable communities statewide, pursuant to Public Resource Code § 71090. The CalEnviroScreen 3.0 is the most current version of the tool.

[2] All statutory references are to the Public Utilities Code unless otherwise noted.

The Program Administrator (PA) will be a single entity capable of providing statewide outreach, marketing and implementation activities for the program. The PA shall propose a plan for implementing and operating the DAC-SASH program in compliance with this decision. The PA shall file a Tier 3 Advice Letter, subject to approval in a formal resolution Letter, for a DAC-SASH Program Handbook. In addition, the PA must detail a program budget, data collection and reporting requirements, marketing and outreach plans, and a program implementation plan.

Once the DAC-SASH Program Handbook is adopted program adjustments may be proposed by the PA via a Tier 2 Advice Letter. Pursuant to party responses and Energy Division review of the advice letter, staff will determine if suggested program changes(s) require a resolution or modifications of a Commission order, and if so, the changes(s) could be considered by the full Commission, following notice to parties and an opportunity to comment.

Major Responsibilities of the Program Administrator

The PA will be selected through a competitive solicitation, specifically a Request for Proposals (RFP). RFP responses will be evaluated to determine whether potential the PA is adequately staffed with personnel who have the following qualifications and experience:

- Experience installing and/or designing solar PV systems
- Experience serving low-income populations
- Experience developing marketing strategies directed at low-income communities and accessible communications for persons with disabilities
- Experience creating finance packages appropriate for energy efficiency measures and/or solar energy systems
- Knowledge of the needs of low-income, single-family homeowners
- Language ability for major language requirements of eligible low-income populations
- Knowledge of CARE and FERA programs
- Experience and knowledge of energy-efficiency measures and energy audits at the residential level
- Ability to create partnerships with private sector financing entities

- Experience delivering programs through collaboration with multiple stakeholders (i.e., no preexisting constraints on partnering latitude)
- Knowledge of or experience with job training and/or workforce development programs, especially for low-income communities
- Data gathering and analysis skills

The successful bidder for PA must demonstrate the ability to perform the following functions:

- Establish relationships with low-income, single family homeowners
- Establish relationships with community-based organizations that serve low-income homeowners to conduct outreach
- Partner and work with solar installers to install PV on target homes, and partner with appropriate entities to develop " green job" training or other workforce development programs
- Hire multilingual staff to meet language requirements of low-income populations
- Hire staff that can develop communications accessible to persons with disabilities
- Educate low-income customers on solar technology and energy efficiency measures
- Create a marketing plan to attract eligible populations of all qualifying income levels
- Build organizational capacity to meet the demands of a statewide program
- Implement the strategy through a program implementation plan, through either a phase-in or statewide approach, to achieve program milestones
- Collaborate and partner with city and county housing agencies to create in-place, flexible financing packages
- Explore other funding options with corporations and government agencies
- Work with PG&E, SCE, and SDG&E to direct incentive payments to eligible recipients
- Work with the Commission's Energy Division staff and an independent evaluator to monitor and report on the program's progress
- Coordinate with the administrators of the CARE, FERA and ESAP programs on behalf of program participants, wherever necessary
- Provide customer support, including responding to complaints, problems, and maintenance needs

RFP responses will be evaluated based on the qualifications and abilities listed above as well as respondents marketing and outreach plans and program implementation plans. Program implementation plans should address financing approaches and methods for integrating solar investment with low-income housing rehabilitation. We encourage plans to include a workforce development plan that provides solar installer job training for low-income communities.

Program Reporting/Data Collection

The PA shall submit semi-annual reports to the Director of the Energy Division on progress of the DAC-SASH program. The semi-annual reports should include the following items, but Energy Division may modify the list as appropriate:

- Number of applications received
- Number of applications accepted
- Size of installations and expected annual output
- Total system cost in $/kW before subsidy
- Progress of installations
- Geographic areas served
- Incentive dollars paid by each utility
- Installer used (if applicable)
- Applicant enrollment with the Energy Savings Assistance Program (ESAP)
- Administrative and marketing expenditures

The PA shall submit to an annual audit of program expenditures. The purpose of the audit is to ensure program funds are paid to legitimate and verified installations of solar energy systems on qualifying homes and that administrative funds are spent in a reasonable and appropriate manner. Energy Division should ensure this audit requirement is part of the PA's contract.

Program Incentive and Financing Structure

Incentives shall be paid only after the PA verifies that system installation is complete, and the solar energy system is operable, located in a program eligible disadvantaged community and application requirements have been met. The PA will ensure development of program materials and procedures, including; application forms in various formats and languages, where needed, and provide technical assistance with the application processes.

To qualify for incentives under this program a participant may apply once for a single-family property that is owner-occupied and located in an eligible disadvantaged community as defined within this decision. Participating customers must meet the income eligibility requirements for the CARE or FERA programs, and must enroll in the utilities' Energy Savings Assistance Program, if eligible.

Households can apply for a full-subsidy for systems that produce at least 1 kilowatt (kW) and not more than 5 kWs (CEC-AC). The DAC-SASH program offers one non-declining incentive level of $3/W, CEC-AC.

The applicant must submit a federal income tax return from the year prior to the application to support estimated tax liability and CARE eligibility.

The PA should seek low-cost loans through local government housing agencies or other private sources to cover the gap between the partial subsidy and total system cost.

Program Budget and Program timeline

The program funds will be collected on an annual basis, beginning on January 1, 2019, and continuing through the end of 2030. Annual collections will be $10 million per year.,

The program will be funded by Pacific Gas and Electric Company (PG&E), Southern California Edison Company (SCE), and San Diego Gas & Electric Company (SDG&E) according to the following percentages:

Utility	**PG&E**	**SCE**	**SDG&E**	**Total**
Percentage	43.7%	46%	10.3%	100%

The PA shall ensure that funding is allocated as follows across program functions:

Administration	10%
Marketing and Outreach	4%
Evaluation	1%
Incentives	85%

Program funds not allocated to specific projects, based on reviewed and approved project applications, by the program end date of December 31, 2030, the program end date, shall be returned to ratepayers.

Program Performance Requirements

To qualify for incentives, a system must meet a minimum performance requirement of 85% of the Design Factor (DF) based on a modified Estimated Performance Based Buydown (EPBB) calculation. For purposes of the DAC-SASH, the Design Factor shall be calculated without the geographic correction. If the Design Factor is less than 85% the system does not qualify for program incentives.

All other SASH program requirements not changed or modified for performance requirements shall apply here for DAC-SASH.

Customer Protection Standards for Third Party Owned Systems

The following Minimum Customer Protection Standards for Third Party Owned (TPO) systems shall apply:

1. Ensure program customers receive at least 50% of the savings, as compared to standard utility rates, from the solar generating equipment;
2. Reduce or eliminate barriers for customers with poor credit (low FICO scores) to qualify and participate;
3. Address concerns that homeowners may have about moving or selling their home during the TPO contract term;
4. Cover maintenance, operations, inverter replacement, and monitoring;
5. Prohibit liens on homes;
6. Minimize the risk to the low-income customer that the solar system would be removed for delinquent payments;
7. Ensure that all costs are apparent and upfront and that there is no risk that the TPO deal would result in an additional financial burden to the family;

8. Standardize financial terms for low-income customers where possible;
9. Protect the customer against terms that could change after contract signing;
10. Require that TPO agreements note the potential for additional costs associated with the contract, if applicable;
11. Require the TPO provider to clearly explain that rate changes will affect the economics of a power purchase agreement; and
12. Require that TPO agreement provisions spell out what happens in the event that the solar financing company defaults.

Energy Efficiency Requirements

The PA must conduct Energy Efficiency Training with each participating household. DAC-SASH applicants must enroll into the utilities' low-income energy efficiency program, referred to as the Energy Savings Assistance Program (ESAP), if eligible. The ESAP program is administered by the IOUs. If the applicant is eligible for ESAP, this will satisfy the requirement for the program energy efficiency requirement. Applicants may also include an energy efficiency audit of the subject property with their incentive application. The energy efficiency audit should be current within two years of the date of the application. The PA will review the audit along with the application to determine the maximum system size that can receive an incentive through the low-income incentive program. The maximum system size that can receive low-income solar incentives should be based on customer usage, adjusted based on an estimate of energy savings resulting from either:

- installation of all feasible ESAP measures (for those applicants who qualify), or
- if applicants do not qualify for ESAP, the PA shall review all other feasible measures as if they were ESAP eligible.

While installation is not required, the PA should assist the applicant with financing for potential installation of energy efficiency measures identified by the applicant's audit along with their solar energy system.

The PA shall ensure incentives are not paid until either an ESAP assessment is completed or the energy efficiency audit has been reviewed and approved.

Program Evaluation, Measurement and Verification

Every three years beginning in 2021, Energy Division shall select an independent evaluator through an RFP process similar to that used to select the Program Administrator. The evaluation should include, but is not limited to, the following factors:

- Number of households served
- Cost of program per household (both incentive costs and total costs including program administration)
- Overall cost of program and cost of program components (i.e., administration, marketing, and incentives)
- The average amount (and percentage) energy bill is reduced per household (both in dollars and kWh)
- Whether participating households have performed an Energy Efficiency Audit, enrolled in ESAP, and had an evaluation for any energy efficiency measures implemented.
- Other, non-solar energy saving measures households have implemented along with their solar installation
- Whether or not the program increased household debt-load
- Customer satisfaction
- Turnover of homeowners in houses served and ongoing residence status of the home
- Languages used in outreach and languages spoken by participating households
- Location of households served
- Geographic coverage within eligible disadvantaged communities
- Participation levels of households served within eligible disadvantaged communities versus similar market sectors outside
- Percent of total CARE/FERA customers in DACs served by the program
- Percent of total ESA customers served by the program
- Effectiveness of energy efficiency measures as related to PV systems
- Effectiveness of marketing and outreach efforts
- System performance and maintenance adequacy

- Implementation of minimum consumer protection standards for systems served by approved third-party operator's
- Effectiveness of job training activities
- Number of local job trainees
- Number of local job hires linked to the program

The program evaluation will rely upon Commission evaluation protocols as adopted for utility energy efficiency programs. In particular, the evaluation should draw upon:

- Impact Evaluation Protocols
- Process Evaluation Protocols

Job Training/Workforce Development Requirements

The DAC-SASH program will incorporate job training programs intended to promote green-collar jobs in low-income communities and to develop a trained workforce that will foster a sustainable solar industry in California. Each project installation is required to hire at least one eligible job trainee to work on the installation[3]

In order to align with the industry standards, the below categories are relevant job task analysis categories:

Directly work on solar installation

- Installing Electrical Components
- Installing Mechanical Components
- Completing System Installation
- Conducting Maintenance and Troubleshooting Activities

Project Design/Project Engineering

[3] Eligible job trainees come from PV installation and design training programs including those offered by a California Community College or other PV-training programs offered to the public by local government workforce development programs, community nonprofits, private enterprises or the electrical workers union with 40+ hours of instruction and/or hands-on PV installation and design training.

- Designing Systems

Project management/coordination
- Managing the Project

Marketing and Outreach

The PA should develop a marketing and outreach program that meets the following specifications and is targeted to eligible DAC households:

- The PA should collaborate with local public and non-profit community based organizations or to find and attract eligible households.
- The PA should coordinate with utility CARE and FERA programs to identify qualifying low-income homeowners in eligible disadvantaged communities.
- The PA must create outreach materials and a plan to educate low-income customers on solar technology, on topics including but not limited to:

    - Proper inspection and long-term maintenance of the PV system in order to ensure energy bill benefits.
    - Various measures, including behavioral changes, energy efficiency, and solar, that recipients can use to manage their energy usage and bills.
    - Information regarding where state assistance for energy efficiency measures can be obtained.
    - How to apply for federal tax credits.

The marketing and outreach plan must align with the language needs of low-income communities, and meet the Dymally-Alatorre Bilingual Services Act of California (1973) that guides the provision of information to Low English Proficiency populations. The plan must also address the accessibility needs of persons with disabilities.

(END OF APPENDIX A)